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THE CHEMICAL MARKET AUTHORITY

October 26, 1959

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Helium Curbs May Float Away As New Plant Starts Producing

The voluntary allocation system that has restricted sales of helium by the government to essential uses may be lifted next month. At least this is the hope and expectation of officials in the Interior department who are planning to attend the dedication, November 17, of the latest of the government's helium producing plants. As industry knows only too well, helium demands have greatly outpaced supplies for the past year and a half because of the large amounts needed for the defense mobilization program, plus the ever-increasing number of new uses found for the gas.

As a result, the government has been restricting sales first to defense contractors, then to medical uses, scientific uses and so on down the line in the order of greatest essentiality.

To Change Supply-Demand Picture

The new plant now starting to reach its peak capacity will push supplies ahead of demand and will enable the government to maintain that position until congress passes legislation for expansion of the producing industry, expected next session.

The new producer is the plant at Keyes, Okla., in the heart of the helium area, with a designed capacity of approximately 290 million cubic feet of helium a year, the largest extraction plant of its kind now in existence. At peak operation, the Keyes plant will be processing 50 million cubic feet of natural gas a day to extract the helium, which averages 2 percent.

Secretary of the Interior Fred A. Seaton, in announcing the November 17 dedication date for the plant, said that use of helium has increased five-fold in the past ten years and will increase still further in the future.

Accordingly, he has proposed a national helium-conservation program under which up to twelve additional helium-extraction plants will be built and operated, either by industry or government, to obtain helium from natural gas before the gas is burned as fuel.

In asking congress for the legislation, Secretary Seaton has pointed out that construction of the twelve plants will conserve for future use 32 billion cubic feet of helium which otherwise will be lost when natural gas containing it is consumed for fuel.

Lime Kiln for Dow Will Be Giant-Size

Dow Chemical Company is going to own the biggest lime kiln in the world. The Midland, Mich., company will break ground in Ludington, Mich., before the end of the month for construction of what it says will be the greatest kiln of its kind ever built—capable of producing 600 tons of lime a day.

The installation will be built at Dow's Ludington division, adjacent to two other kilns already operated there by the company.

Chlorine-Caustic Plant Is Nearing Completion

Before the year is out, Pennsalt Chemicals Corporation expects to complete the first phase of a $6 million modernization program at its Wyandotte, Mich., chlorine-caustic soda facilities.

The first section of improvements, now nearing completion, includes new 50 percent caustic soda evaporating facilities designed to reduce costs and improve quality.

The second major phase will be the replacement of several thousand Gibbs diaphragm-type electrolytic cells with a much smaller number of 30,000-amp., more economic cells, along with improvements to auxiliary cell-room equipment.

When the new cells go on stream in mid-1960, the facility is expected to produce chlorine and caustic soda with product quality and operating efficiency equal or superior to any existing diaphragm cell operation.

Pennsalt's Michigan plant, located downriver from Detroit, is one of the company's largest single manufacturing units

—*Continued on page 47*

Copper Products Prices Are Put Up by Beryllium

Beryllium Corporation, Reading, Penn., has advanced prices on copper mill products and re-melt ingot. Prices on all re-melt ingots and on some wrought products are 5 cents per pound higher.

Unaffected by the price advance are master alloys of beryllium copper, beryllium aluminum and beryllium-magnesium aluminum.

DOIP Is Added to List Of Eastman Plasticizers

DI-(2-ethylhexyl) isophthalate (DOIP) has been added to the list of plasticizers available from Eastman Chemical Products, Inc., Kingsport, Tenn., a subsidiary of Eastman Kodak Company. A high-quality primary plasticizer for both direct compounding and plastisol formulations, DOIP compares favorably in performance characteristics with the well known dioctyl phthalate (DOP), Eastman Chemical says.

The plasticizer efficiency of DOIP in poly (vinyl chloride) is excellent. Film comparisons with DOP-plasticized material show very close agreement in most physical properties, although DOIP-plasticized films have a lower volatility loss on heat-aging and are slightly more resistant to water extraction.

The Week's Price Changes

Cadmium Colors, Palm and Safflower Oils, Zinc Advanced. Carnauba Wax, Mercury, Soybean Meal, Tallow Reduced.

Advanced

Cadmium colors, CP, 10c. per lb. (p. 55).
Cadmium-selenide lithopone colors, 3c. per lb. (p. 55).
Castor oil, Brazilian, ¼c. per lb. (p. 64).
Cocoa butter, 1c. per lb. (p. 64).
Coconut oil, crude, Pac. coast, ¼c. per lb. (p. 64).
Corn oil foots, ⅛c. per lb. (p. 64).
Cod oil, ¼c. per lb. (p. 64).
Cottonseed meal, $6 per ton (p. 64).
Palm oil, drums, ¼c. per lb. (p. 64).
Peanut meal, $6 per ton (p. 64).
Peanut oil, crude, ¼c. per lb. (p. 64).
Refd., ¼c per lb.
Safflower oil, ½c. per lb. (p. 64).
Zinc metal, 1c. per lb. (p. 36).

Reduced

Carnauba wax, No. 3 Ceara, 2c. per lb. (p. 64).
Parnahyba, 2c. per lb.
Chalky, 2c. per lb.
Yellow, 2c. to 4c. per lb.
Copra, $2.50 per ton (p. 64).
Cottonseed oil, crude, ⅛c. per lb. (p. 64).
Refd., ⅛c. per lb.
Greases, ⅛c. per lb. (p. 64).
Lard, cash, ⅛c. per lb. (p. 64).
Mercury, $6 per flk. (p. 36).
Soybean meal, 50c. per ton (p .64).
Tallow, ⅛c. per lb. (p. 64).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Oct. 23, 1959	Oct. 16, 1959	Oct. 24, 1958
111.05	111.09	108.60

Geigy and Curare Make a Bang

Geigy Chemical Corporation has just made a big bang in the world of science to mark the opening of its new pharmaceutical research laboratories in Ardsley, N.Y. Using the dedication ceremonies as a sounding board, the company has announced discovery of the chemical constituents of calabash curare, a South American arrow poison, and synthesis of the material's most important alkaloids.

Making the announcement was no less a scientific light than Prof. Paul Karrer, Nobel Prize-winning chemist from the University of Zurich.

Speaking at the ceremonies last fortnight, Dr. Karrer revealed that some of these man-made muscle relaxant substances already are in clinical use in several hospitals in Switzerland.

Valuable in Operating Rooms

Curare has been recognized as a valuable drug in modern operating rooms to relax the muscles and thus make possible administration of much smaller amounts of anesthetics during major surgery, which reduces the danger of circulatory disturbances and other side-effects. Calabash curare is the strongest and most effective kind identified to date.

Dr. Karrer reported that he has isolated for the first time forty-eight of the sixty-three alkaloids from calabashes in a pure state. Of these, two of the most active (toxiferine and dehydro-toxiferine) have been synthesized. All alkaloids fall into two groups, one with approximately twenty carbon atoms, the other forty. Only

—*Continued on page 52*

DIVISION MANAGER: Charles H. Carpenter, jr., named to head the newly-formed international division of Metal & Thermit Corporation, New York.

Sucrose Acetate Isobutyrate Price Is Lopped by Eastman

Eastman Chemical Products, Inc., New York, a subsidiary of Eastman Kodak Company, has made a 4½-cent-per-pound reduction in the price of sucrose acetate isobutyrate (SAIB).

Demand for the new product plus refinement in production technic developed during the past eighteen months has made the price reduction possible. At 35½ cents per pound, Eastman is hoping for a bigger market.

Dow Changes Its Mind

Dow Chemical Company is not going to be turning out a-phenoxypropionyl chloride, as it had planned (OPD, 10/19/59). The Midland, Mich. firm reported last week that due to circumstances beyond its control, plans for producing the high-purity intermediate have been dropped.

Index to News and Market Reports

Association News

MCA Sets Speaker Slate 70
Merck President Hits Tariffs 7
NPVLA Elects Battley 60
Packagers Meeting Is Set 70
Paint Federation Elects Adams 59
Paint Sales May Top $2 Billion in '60 7
Pesticide Business Will Top 1958 5
Rosin Use Up 18 Percent 5
Vernon Re-Elected NACA President 7

Government News

Additives Makers in a Quandary 3
Anhydrous Ammonia Ruling Told 3
Chemical Stock News Good 3
Coaltar Color Law's Loophole Plugged .. 3
Cyanamid Winds Up Antibiotics Defense. 7
Drug Men Eye Kefauver Net 3
Helium Curbs May End 4
Morgantown's Up Again 5
Plant Regulators: NACA Seeks Extension 7
Tung Nut Production Cut Seen 38
Tungsten Import Probe Off 7

Industry News

Borden Set to Pick Plant Site 5
Carbide Is Weighing Insecticide Plant .. 3
Carbide Opens Technical Center 5
Chemical Dose Prescribed 7
Chlorine-Caustic Unit Near Completion .. 4
Copper Products Prices Put Up 4
DOIP Added to Eastman List 4
Dow Changes Its Mind 4
Dow Establishes New Unit 5
Dow to Round Out Latex Output Pattern 3
DuPont Doubling Stake in Methylamine. 3
Enzyme Agents Named by Miles Chemical 57
FMC to Build Missile Equipment 39
Geigy and Curare Make a Bank 4
Goodrich Goal: $50 Million 3
Interchemical Offers New Colors 5
Lime Kiln Slated by Dow 4
Metal Oxide Samples Offered 63
Monsanto Expands Unit 7
Naphthalene, Shortage Cited 3
Pitts. Coke Deal's in On Maleic 5
Sucrose Acetate Isobutyrate Reduced 4
Tidewater Constructing Gasoline Plant .. 66
United Carbon Sells Interests 5
Vinyl Coatings Growth Forecast 7

International News

Carbide Set to Build Lab Abroad 5
Ceramic Opacifier Plant Scheduled 57
Soviets Develop Live Virus Vaccine 46

Personnel News

Canadian Industries Names Clegg 5
Ciba Names Marketing Chief 3
Escambia Fills Post 66
3M Appoints Duke 3
Metal & Thermit Names Carpenter 4
U. S. Borax Names Taylor 5

Market Reports

Acids 36
Adhesives 49
Agricultural Chemicals 42
Aliphatic Organics 44
Aromatic Chemicals 63
Botanical Drugs, Gums 52
Chemical Specialties 49
Coal Chemicals 46
Coatings Materials 55
Drugs 51
Essential Oils 62
Fats & Greases 65
Fertilizer Materials 42
Fine Chemicals 51
Heavy Chemicals 36
Industrial Organic Chemicals 44
Metals, Nonferrous 36
Naval Stores 56
Oil Cake and Meal 65
Oils 64
Paint Materials 55
Pesticides 42
Petrochemicals 44
Petroleum Derivatives 43
Protective Coatings Materials 55
Softening Agents 49
Spices 63
Surface Active Agents 49
Thickening Agents 71
Trade Name Chemicals 49
Waxes 65

General Features

Advertisers' Index 71
Association Meeting Dates 7
Bids Wanted 54
Classified Advertisements 70
Coal Chemical Output 46
Crude Oil Stocks 43
Current Market Quotations 10
Data Offered 40
Editorials 9
Imports 54
Jobs & People 48
Obituaries 41
OPD Price Index 4
Washington Talks It Over 10

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Morgantown's Up Again

The government is going to have one more go at unloading the big Morgantown Ordnance Works — most recently tenanted by Olin Mathieson Chemical Corporation.

And this time Washington is bringing in a pro to handle the transaction. General Services Administration has just appointed Harry A. Taylor Company, East Orange, N. J., specialists in industrial property marketing, to go out and peddle the big piece of Morgantown, W. Va., real estate.

The Taylor organization has been authorized to offer the property either in one piece or as two separate pieces. If sold in two parts, the chemical units will comprise one piece and the oven area, with its production potential of 400,000 tons of coke annually, will comprise the other.

Two West Virginia realty firms will help Taylor in its efforts to sell the big installation that the government built in the early days of World War II. Taylor will also have the services of Singmaster & Breyer, New York engineering consultants, for advice on the technical aspects of the sale.

Olin Mathieson gave up on the plant about a year and a half ago (OPD, 3/31/58). The company said it was stopping the production of ammonia and methanol there because it found the Morgantown installation "uneconomical." Competition from lower-cost plants was one of the factors in forcing Olin's decision.

The Morgantown plant was designed and built by E. I. duPont de

—Continued on page 40

Carbide Opens Technical Center, Starts Up Epoxy Chemical Facility

Union Carbide Chemicals Company, hardly a slowpoke in the matter of growth, is moving ahead two steps at a time these days. Last week it (a) opened a new technical center at South Charleston, W. Va., and (b) began operations at a 10-million-pounds-a-year epoxy chemicals plant in Institute, W. Va. Besides the chemical company, the center is set up to serve two other divisions of Union Carbide Corporation—Union Carbide Olefins Company and Union Carbide Plastics Company—as well as its design and engineering department.

BUYER: L. V. Clegg, appointed general purchasing agent by Canadian Industries, Ltd., Montreal. He succeeds J. D. Wright, who has been made general manager of the chemicals division.

The Institute facility is not yet turning out epoxides and other oxygenated chemicals at full capacity, but Carbide expects output to climb gradually over the next several months.

The New Epoxy Chemicals

Among the new epoxy chemicals coming from the new installation are "Epoxide-201" (3,4-epoxy-6-methylcyclohexylmethyl-3,4-epoxy-6-methylcyclohexane carboxylate), "Epoxide-206" (vinylcyclohexane dioxide), "Epoxide-207" (dicyclopentadiene dioxide), and "Flexol" plasticizer EPO (epoxidized soybean oil). The company also plans to produce *epsilon*-caprolactone in the unit.

Three others also are on the way to market, according to E. E. Fogle, president of the chemicals company. Included: didecyl epoxy tetrahydrophthalate—a vinyl resin stabilizer.

The technical center now houses five major functions: research, development and engineering departments of the chemicals company, the engineering department of Union Carbide Olefins and the design and construction department. In addition, work on resin research and development is also done for the plastics company.

The scope of activity at the center ranges from theoretical studies on molecular structure and basic research in chemical reaction mechanisms to pilot-scale production of new products and the

—Continued on page 39

Borden Set to Pick Home for New Plant

Borden Chemical Company, drawing close to start-up time on construction of a new resins and formaldehyde plant, has narrowed down the choice of sites in the San Francisco Bay area to where they can be counted on the fingers of one hand.

The company says it has several in mind and expects to name the right one any day now.

Construction is slated to begin by year's end, but the company is almost ready to move in right now. A. R. Marusi, president of the chemical company, a unit of Borden Company, reports that equipment

—Continued on page 63

Interchemical Is Entering Specialty Pigment Business

Interchemical Corporation is entering the specialty pigment business with the offer of five colors by the R-H-B unit of the color and chemicals division, Hawthorne, N. J.

The new colors, available dry, in press-cake and in dispersed form, include an anthraquinone vat yellow, a special benzidine yellow, a vat orange, a thio indigo maroon and a transparent bronze.

Pesticide Business This Year Seen Pretty Good, With Volume Topping 1958's $265 Million

Nineteen hundred and fifty-nine will wind up as a pretty good business year for pesticides producers. Authority for this roseate analysis is Jack V. Vernon, president of the National Agricultural Chemicals Association, who told NACA at its twenty-sixth annual meeting in French Lick, Ind., last week that the industry's dollar volume this year will without doubt top 1958's total of $265 million. What's more, he indicated that there's likely to be some improvement in the farm chemicals profit picture.

Mr. Vernon, who is a vice-president of Food Machinery & Chemical Corporation, New York, said he still stands behind a prediction he made in 1958: pesticides sales of at least $1 billion by 1975. To fulfill i's promise, he declared, the farm

Other stories on NACA's annual meeting in French Lick, Ind., last week appear on page 7.

chemicals industry must sell aggressively to its long-established customers and develop newer markets. And, he added, it must face up to its current problems, which he felt are "in the areas of public relations and legislation."

In connection with the industry's public relations obligations, Mr. Vernon pointed to what he called "the burgeoning field of food quackery."

"I am convinced," he continued, "that we should recognize—and not minimize —the fact that much adverse criticism aimed at pesticides originates with manufacturers of concoctions sold as the answer to all of man's health and nutritional problems.

Sees Racket, Criticism Related

"The growth of this racket in recent years, and the increase in much of the criticism of pesticides are directly related." Mr. Vernon contended.

Conceding that this is just one facet of the total problem, the NACA president insisted that the way to get the best possible public relations is for "all agencies, companies and organizations involved in public health and agriculture" to cooperate in informing the public, both through media of information and education.

As for the problem of legislation, he said, "the outlook is for more rather than less legislation in the foreseeable future."

He made it clear, however, that he believes legislation is needed "both for the protection of the public and for the sound and orderly conduct of our business," adding that this is a fact that all in the pesticides industry must recognize.

That, he said, explains why NACA has spent so much time and money "working for the enactment of sound pesticide legislation at federal, state and local levels."

But, Mr. Vernon noted, there's also a

—Continued on page 53

RESEARCH HEAD: Dr. D. S. Taylor, named president of US Borax Research Corporation, a subsidiary of United States Borax & Chemical Corporation, Los Angeles. C. L. Randolph has been made vice-president.

Dow Establishes New Unit, The Saginaw Bay Division

Dow Chemical Company, Midland, Mich., has formed a new unit, to be known as the Saginaw Bay Division.

The new division will group three separate Dow operations located in Bay City, Mich., in a 1,400-acre tract on the Saginaw River near Saginaw Bay. Two of them are newly-completed plants now moving into production.

The three operations are the petrochemicals plant, producing ethylene, butadiene and other petrochemicals; the polychemicals area, which will produce polyethylene and polypropylene plastics materials; and the Bay Refining Company, acquired by Dow in 1956, which is supplying petrochemical raw materials for the new division in addition to its own sales of petroleum products.

Pitts. Coke Deals In On Maleic Anhydride

It's official now! Pittsburgh Coke & Chemical Company is dealing itself in on maleic anhydride. The firm will start construction on a new maleic facility soon and expects to be in production at its main Neville Island, Pa., plant by early 1961.

In confirming the long-awai ed move last week, Pittsburgh Coke had one little surprise for the chemical trade. Capacity of the new installation will be 20 million pounds a year, some 5 million pounds more than had been expected.

First hinted in the company's 1958 annual report (OPD, 3/16/59), the step is considered a logical one by Pittsburgh Coke in rounding out its line of chemical intermediates.

The concern believes it will also broaden its position as an integrated producer of chemical raw materials. Other Pittsburgh Coke products: fumaric acid, maleic's trans-isomer, and phthalic anhydride.

According to W. K. Menke, vice-president of the concern's chemical group,

—Continued on page 48

United Carbon Sells Interest in Two Firms

United Carbon Company, New York, has sold its minority interests in Odessa Butadiene Company and Odessa Styrene Company to El Paso Natural Gas Products Company.

El Paso, already the operator and majority holder of both firms before acquisition of United Carbon's interests,

—Continued on page 66

Carbide Set to Build Service Lab Abroad

Union Carbide Corporation is planning to build a customer service laboratory for plastics in Geneva, Switzerland. The laboratory will be under the supervision of Union Carbide Europa, S. A.

Initially, the Geneva laboratory will be devoted primarily to rendering technical service to customers using polyethylene manufactured in the United States by the New York-based parent company.

Rosin Use Up 18 Percent—But Trouble Lies Ahead

Domestic disappearance of all types of rosin will rise 16 percent this season—to 1.6 million drums. Exports will jump by 25 percent—to 625,000 drums. Total disappearance will be 2,225,000 drums—up 18 percent over last season.

This is the prediction of H. L. Meyer of Chemetar Pine Products Corporation, New York. Mr. Meyer sees this year's output of gum rosin at 350,000 drums, and wood rosin at 1,175,000 drums. Tall oil rosin output should hit 365,000 drums, making total output 1,890,000 drums, not quite 2 percent above last season's output.

Speaking before the annual naval stores breakfast at the annual convention of the National Paint, Varnish & Lacquer Association in Atlantic City, N. J., last week, Mr. Meyer emphasized that "We would hardly have been in a position to meet this added demand without the reserve stocks of Commodity Credit Corporation."

Mr. Meyer believes that it's time to consider the position of the US in relation to world trade in naval stores. About 60 percent of CCC-held stocks have been sold, he says. Only 195,631 drums are left, and these too will go in due course.

Therefore, our position bears watching, he believes, particularly since our rosin exports over the last few years have represented 40 to 45 percent of the entire volume of world rosin trade.

What about the future? Here's what Mr. Meyer predicts:

- Domestic consumption of rosin during the next two seasons will exceed 1.6 million drums per season.
- At the same time, gum rosin output

—Continued on page 35

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RE-ELECTED NACA PRESIDENT: Jack V. Vernon, vice-president of Food Machinery & Chemical Corporation, New York, who last week was elected to a third consecutive term as president of the National Agricultural Chemicals Association. (Other stories on NACA's annual meeting in French Lick, Ind., last week may be found elsewhere on this page and on page 5.)

Vinyls for Coatings Up 53 Percent by '63

Sales of vinyl resins for paints and coatings will hit 130 million pounds annually by 1963 for a gain of 53 percent over 1959. This year they're expected to total more than 85 million pounds—itself the highest in history and 30 percent more than '58.

Such is the picture painted last week by H. W. Greenhood, market manager of Union Carbide Plastics Company, division of Union Carbide Corporation, at the Paint Industries Show in Atlantic City, N.J.

Mr. Greenhood's predictions served to underscore a number of new developments announced at the show:

- Union Carbide Plastics revealed a new method for the production of epoxy ester coatings.
- Shell Chemical Corporation, New York, claimed a significant technical breakthrough in the application of epoxy resins coatings through the development of new hardening agents.
- Colton Chemical Company, a division of Air Reduction Company, Cleveland, Ohio, reported that it is extending its line of vinyl copolymer emulsions to the exterior house paint market.
- Archer - Daniels - Midland Company, Minneapolis, Minn., disclosed that it has

—*Continued on page 63*

Cyanamid in Last Lap Of Antibiotics Defense

American Cyanamid Company, New York, last week swung into the last lap of its defense against Federal Trade Commission charges of conspiracy and monopoly in the field of broad-spectrum antibiotics.

One of five companies named in an FTC indictment, Cyanamid will be followed to the stand by Chas. Pfizer & Co.,

—*Continued on page 40*

Paint Industry Is Ready to Do More Than $2 Billion in Business For 1960: Battley of NPVLA

The paint industry will do better than $2 billion worth of business in 1960—for the first time in history. So says Joseph F. Battley, president of the National, Paint, Varnish & Lacquer Association. Recalling that back in 1947, when he first joined the staff of the association, the industry was trying to hit the $1-billion mark in annual sales for the first time, Mr. Battley told NPVLA's seventy-second annual meeting in Atlantic City, N.J., that this year paint sales should soar over $1.75 billion—a new record.

Mr. Battley said that the American public was never more paint conscious than it is today. "Not only paint conscious," he said, "but paint-wise, thanks to our national publicity program and now with our new 'Hidden Power' sales training courses."

Growth in Technical Data

"There has been a tremendous growth in the amount of technical information on our new products furnished to trade and consumer publications, students and educators, civic and social clubs, and business and trade groups. These, plus increased showings of our industry films, have whetted consumer appetites and ripened interest into sales."

The industry's sales volume is becoming more and more dependent upon the hidden power of color, Mr. Battley stated. Because of this, he said:

"We have developed many new and unique color promotion ideas and merchandising materials. A new series of color booklets, designed to further educate the consumer on the advisability of using paint colors in home and institutional decor, will be published in the new year."

Mr. Battley warned, however, that future competition will be stiffer than ever and that the paint, varnish and lacquer industry must go all out with accelerated public relations, publicity, advertising, sales promotion and sales training—"and in every other field of business activity"—if we are to continue and accelerate the pace of growth.

"What you know as 'competitive surfaces' have also grown and take a good cut into certain of our traditional markets," he pointed out. "These competitive products have blossomed in the past few years through more and more hard selling on their producers' part. We cannot afford to rest on our laurels, nor mark time. We must sell our own prod-

—*Continued on page 59*

Joseph F. Battley

Tungsten Import Probe Off After Petition Is Withdrawn

An investigation of imports of tungsten ores and concentrates being conducted by the Office of Civil & Defense Mobilization was halted last week.

OCDM took the action when Howe Sound Company on behalf of its subsidiary, Tungsten Mining Corporation, withdrew its petition for an investigation that had been on file with the agency for several months.

The probe was in its final stages when the petition was withdrawn, OCDM said. The inquiry was being conducted under section 8 of the trade agreements act because the domestic producer alleged that imports of the ores and concentrates were threatening to impair national security.

Merck President Hits At US-Canada Tariffs

The poet says good fences make good neighbors. But John T. Connor, president of Merck & Co., says it is time the US and Canada started eliminating some of the tariff fences that stand between the two countries—especially the fences that affect the chemical industry.

Mr. Connor does not feel, however, that the fences should go down because international trade is getting any freer. On the contrary, he says he is sorry to say the opposite trend is true. That is what he told the board of directors of the Manufacturing Chemists Association at a meeting in Montreal last week.

The postwar enthusiasm for internationalal free trade has abated, said the head of the Rahway, N.J., drug house. That enthusiasm was dampened from the beginning by the exclusive trade policies of the Sino-Soviet block, he told the meet-

—*Continued on page 57*

Monsanto Expands Unit For Production of Acids

Monsanto Chemical Company's inorganic chemicals division has completed expansion of its Everett, Mass., facilities for the production of the company's "ACL-85" and "70" products (chlorinated isocyanuric acids).

The expansion more than doubles the original capacity of the plant, which was placed on stream two years ago.

Plant Regulators: NACA Is Seeking Extension of Time

Other stories on NACA's annual meeting last week in French Lick, Ind., last week appear elsewhere on this page and on page 5.

National Agricultural Chemicals Association plans to ask for an extension of time under the new plant regulators law. The legislation, which was enacted by the last congress, is scheduled to go into effect on March 5, 1960.

An amendment to federal insecticide, fungicide and rodenticide act, the measure provides that come next March:

- Department of Agriculture start registering nematocides, plant regulators, defoliants and desiccants.
- Food & Drug Administration establish tolerances for residues of such chemicals on raw agricultural commodities under the Miller amendment to the federal food, drug and cosmetic act.

NACA to File Protest

NACA at its annual meeting in French Lick, Ind., last week was told by Joseph Noone, its technical adviser, that the association intends to file a protest soon with the Secretary of Agriculture and the Secretary of Health, Education and Welfare.

Mr. Noone said that NACA will point out the "difficulties and hardships" involved in trying to bring these products into compliance with the insecticide act and the Miller amendment by March 5, and will ask that more time be given.

"Whether or not there will be any extension of the fully effective date beyond March 5, 1960, or how long such an extension might be," he said, "we do not know at this time. We do, however, anticipate that there will be some extension beyond March 5, 1960.

"Such an extension might apply to all nematocides, plant regulators, defoliants and desiccants, or it might apply to only certain classes of those products, or it might be given only on a product-by-product basis."

Problems under the new plant regulators law won't be confined to industry. The administrators will also have their

—*Continued on page 57*

Chemical Dose Prescribed As Over-Population Cure

The world needs a stiffer dose of chemicals to cure its problem of mounting population. That prescription was compounded by Harry B. McClure, vice-president of Union Carbide Corporation, in a speech last fortnight before the American section of the Society of Chemical Industry in New York.

Titled "The Challenge of Ignorance," Mr. McClure's address was delivered at a dinner marking his receipt of the society's chemical industry medal.

While directing his audience's attention to the ominous trend of world population, which is expected to double again

—*Continued on page 53*

Association Meetings

American Association of Petroleum Geologists, bienniel mid-continent regional meeting, Broadview hotel, Wichita, Kan., October 28-30.

American Petroleum Institute, annual meeting, Conrad Hilton, Palmer House and Congress hotels, Chicago, November 9-11.

Antibiotics Annual Symposium, Mayflower hotel, Washington, D. C., November 4-6.

Association of Analytical Chemists, annual meeting, Wayne State University, Detroit, Mich., October 26-28.

Association of Consulting Chemists & Chemical Engineers, annual symposium, Shelburne hotel, New York, October 27.

Atomic Industrial Forum, annual conference, Sheraton-Park hotel, Washington, D. C., November 2-4.

Canadian Manufacturers of Chemical Specialties Association, annual meeting, Royal York hotel, Toronto, November 2-4.

Chemical Bureau Alumni Association, fall get together, Lexington hotel, New York, October 29.

Chemical Industries Exposition, New York Coliseum, New York, November 30-December 4.

Chemical Market Research Association, high polymers meeting, Sheraton-Towers hotel, Chicago, November 12-13.

Chemical Specialties Manufacturers Association, annual meeting, Mayflower hotel, Washington, D. C., December 7-9.

Commercial Chemical Development Association, fall meeting, Statler Hilton hotel, Detroit, Mich., October 28.

Industrial Hygiene Foundation of America, annual meeting, Mellon Institute, Pittsburgh, Pa., October 28-29.

Manufacturing Chemists' Association, mid-winter meeting, Statler Hilton hotel, New York, November 24.

National Association of Manufacturers, annual congress of American industry, Waldorf-Astoria hotel, New York, December 2-4.

National Wholesale Druggists Association, annual convention, Americana hotel, Bal Harbour, Fla., November 7-12.

Oil Recovery Symposium on Southwest Texas, Driscoll hotel, Corpus Christi, Tex., October 29-30.

Packaging Institute, annual packaging forum, Statler Hilton hotel, New York, November 16-18.

Salesmen's Association of the American Chemical Industry, annual business meeting, Commodore hotel, New York, October 27.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, November 4. Annual meeting, Roosevelt hotel, New York, December 2.

Toilet Goods Association, scientific section's mid-winter meeting, Waldorf-Astoria hotel, New York, December 1.

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Oil, Paint and Drug Reporter

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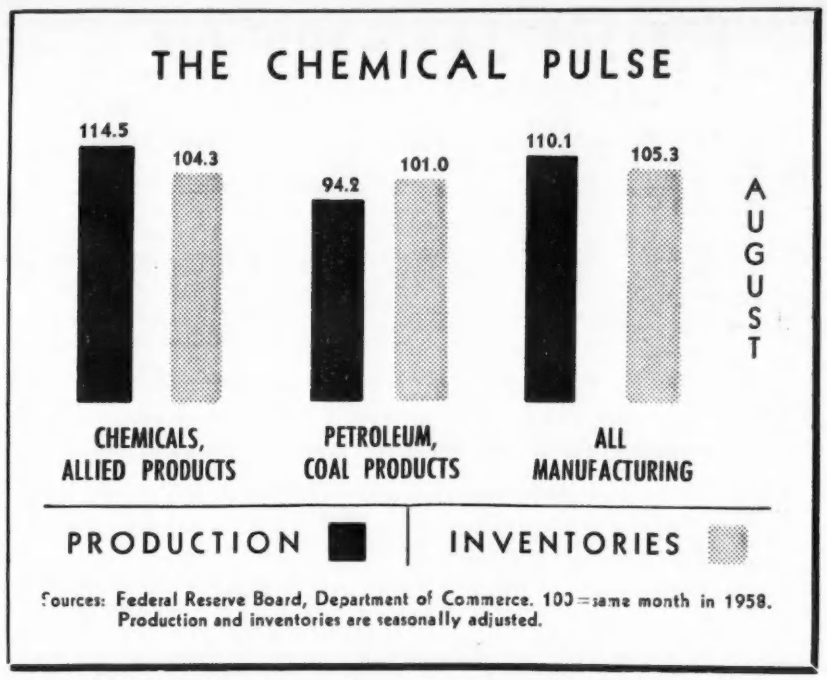

Sources: Federal Reserve Board, Department of Commerce. 100=same month in 1958. Production and inventories are seasonally adjusted.

What Did UN Week Provide

Last week was United Nations Week. To what extent and in what manner was it observed in your community? What can be expected in the way of results deriving from what could have been, may have been, learned from the event?

It is doubtful that the UN event got even the consideration which it should have had throughout this country, such as it got in state and county celebrations in New Jersey. The state celebration was opened by the governor, the first time, according to the American Association for the United Nations, that, in the fourteen years of its observance, an American governor had inaugurated the celebration. In an address at the services in Trenton, the British ambassador to the United Nations left many puzzled by his declaration that "although UN has a solid record of achievement, it has failed to produce solutions to the most difficult and the most dangerous problems" —those arising from differences between the free world and the communist world. Solution of those problems, he declared, must be primarily sought outside the United Nations. As he saw it, the prerequisite breaking down of suspicion and engendering of confidence must be achieved by way of face-to-face meetings of the leaders of both sides. He said that he "found a very general feeling in the UN that the major powers should be allowed and encouraged to try to make progress in solving their differences." What puzzled certain observers was the departure which the speaker's opinion marked from the complaint frequently attributed to UN leaders that the organization was being bypassed in the trend to have international differences discussed and mediated in conferences of representatives of the parties concerned.

The United Nations did not go along with the Soviet declaration that the matter of allegations that Red China was violating the rights of the people of Tibet did not come within the purview of UN purpose and authority. But, UN procedures being what they are, it is not possible to predict what in any regard will be the eventual outcome of its deliberations and experimentations under the proposal that it "call for respect for the fundamental human rights of the Tibetan people and for their distinctive cultural and religious life."

The people of the United States have much to learn about what the UN stands for, what it has to do, and how it goes about that doing. The subject is a confused one for those who believe in the fundamental democratic principle of majority rule. They cannot understand why, in many, if not most, matters, approval of a proposal or a candidacy requires a two-thirds vote; while the negative vote of a single member (called a veto) can defeat and frequently has defeated, endeavors to take a highly desirable and strongly necessary stand on a matter of clear-cut international and humanitarian importance.

Especially confused is the procedure which blocks commendable UN endeavors, resulting, as a recent example, in the dropping of hearings in the differences between South Africa and Southwest Africa.

The people of the United States want to know and should know why the UN is not more democratically operated. They cannot get adequate information out of available data on such things as the allocation of UN secretariat jobs on the basis of the size of the members' respective contributions to the UN annual budget; why this country does not get from nations which it has generously befriended the support it needs and should have in such matters as th prolonged haggling over the election of a member of the UN security council; what should be the position of the United States with reference to the scope of the authority of the International Court of Justice.

United Nations Week should have been a period of information for all in this country who should be concerned with the why's, what's and how's of the United Nations, whether they want to be or not. Some day they will not be pleased to learn why the Soviets are manifesting very much more than a little passing interest in that direction —and getting something out of it.

From Bigger to Better

According to its president, "the world's biggest oil company," recognizing that the industry faces at least several years of worldwide shrinking of demand for petroleum, plans to meet the resulting conditions by stepping up research outlays and cutting back capital expenditures. The oilman said so in a talk to a gathering of security analysts, perhaps to prepare them for his company's departure from its policy of expansion to greater and greater bigness.

Research is an increasingly popular topic in industrial talking these days. It covers a field that is practically unlimited in size and in diversity, comprising all scientific, technical and operative aspects of all areas of commercial, political and social economy. The oilman did not give out any definitive details on what the stepped-up research outlays would be devoted to. His company has a very broad research organization. He did say that, in the current year, the two principal divisions (not specified) of that organization would "spend more than we have spent for this purpose in any previous year"—almost $63,000,000.

Research, of course, is directed to a purpose of being better in some respect. Two years ago, the big oil company put out $1,400,000,000 in capital expenditures with the objective of getting bigger. It plans to cut down to a billion flat this year. That still could do quite a sizable job of biggering. What will be the big side of the bettering by way of research? There are reasons to expect that it will not be in the direction of bigger use of oil or its physical products as such, but may be in areas of petrochemical advances.

The oilman made it plain that new developments in other fields of fuel production had something to do in the motivating of his company's new policy. He made no specific references, but it is to be assumed that he knows all about the boron and other developments in the field of missile and other long-range fueling and has at least some information on the reported replacing of vehicular fuels of the common type by something new in the way of "fuel cells," energized by a combination of electric batteries and a mixture of gases, largely propane.

That points toward a research goal. Whatever may be their practical classification, whether as fuels or as chemicals, the petroleum gases offer the industry a highly potential opportunity to become better in public service—and bigger in earnings. The progress which they already have made in the role of household fuels is but the beginning of a very promising development.

Washington Talks It Over

Who's Going to Be in Charge Here? That's What Chemical Industry Men Would Like to Know About the Job of Gathering Statistics on Synthetic Organic Chemicals.

By Ralph L. Cherry
Washington Editor

Whose job is it to compile statistics on synthetic organic chemicals? The Tariff Commission has been doing it since World War I days, without any question being raised. But now the commission discovers it has no real authority to do so. Chemical men, a little disturbed by the whole thing, say the matter bears close watching.

While it is quite unlikely that the government will discontinue gathering this information, there is some talk of taking the job away from the commission and giving it to the Bureau of Census, with all the incidental confusion that might entail. The Census bureau already gathers the figures on inorganics and is considered to be the government's statistics-gathering arm.

The question was raised some months ago by the Bureau of the Budget when it began a checkup on government spending as part of the overall budget picture. The bureau asked all the government departments and agencies for the legal justification for each item in the budgets so that there would be some legal basis to show to congress for the money requests when they are made.

So far the Tariff Commission has been unable to put its finger on any specific provision in law; the nearest thing that it has been able to come up with by way of a justification is a request by President Woodrow Wilson back in 1916 or 1917 when the Tariff Commission was just getting started in business, for a statistical report on the domestic dyestuffs industry. Like Topsy, this work continued to grow until today it includes all synthetic organics.

Tariff Commission Chairman Joseph E. Talbot estimates that it costs the commission about $100,000 a year to gather and compile the figures on the industry and takes up most of the time of the chemicals division of the commission. He says there isn't any question about the commission wanting to continue to do this work. And, he adds, "We think we are the best ones equipped to do it."

But there is the question of the legal justification, he adds. What the commission is going to have to do some time soon is decide whether to ask congress for specific authority to gather the figures, or get some kind of directive from the White House to justify the work.

OPD'S BOOKSHELF

References on Plastics

Called SOURCE BOOK OF THE NEW PLASTICS,* this book is a compilation of the articles contributed by sixty plastics producing firms, engaged in describing their own products. The materials include seven new primary plastics of 1958. Also described are the significant recent improvements in established plastics and the 100 most important patents issued in the plastics field for 1958.

*SOURCE BOOK OF THE NEW PLASTICS. By Herbert R. Simonds. 354 pages. Reinhold Publishing Corporation. $10.

A Work on Plants

Here is an authoritative volume, called DICTIONARY OF ECONOMIC PLANTS,* that contains descriptions of more than 6,000 species of plants listed by their common and scientific names. The work gives the geographical distribution of and the products derived from the listed plants, and also gives something of their usage.

*DICTIONARY OF ECONOMIC PLANTS. By J. C. Th. Uphof. Cloth. 400 pages. Hafner Publishing Company. New York. $9.75.

CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, October 23 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns ..... lb. 2.45 - 3.00
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls. dms., lb. .41 - .50
Acetaldehyde, 99% dms., c.l., works. lb .12 - —
dms., l.c.l., works ..... lb .13½- —
tanks, works ..... lb .10 - —
Acetaldol (see Aldol)
Acetanilide, tech., flaked, bbls., bgs. c.l., frt alld lb. .32½- —
bbls., bgs., ton lots, frt alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP bbls., 225-lb dms any quantity lb. .79 - —
100-lb dms., any quantity lb. .81 - —
Acetic acid, coml. or redist., 28%, bbls 100 lbs. 4.80 - —
56% bbls. ..... 100 lbs 8.25 - —
70% bbls. ..... 100 lbs 9.95 - —
80% bbls. ..... 100 lbs.10 45 - —
Acetic acid, glacial, syn., CP, dms., dlvd 100 lbs.22.00 -23.00
tech., dms., c.l., dlvd. .. 100 lbs.13.75 - —
dms., l.c.l., dlvd. ..... 100 lbs.14.25 - —
tanks, dlvd. ..... 100 lbs.10.00 - —
USP, cbys., dlvd ..... 100 lbs.31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret. dms., l.c.l., dlvd E. lb. .18 - —
tanks, dlvd. E. ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib dms. l.c.l., dlvd. ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib dms., l.c.l., dlvd. ..... lb. 1.36 - —
Acetoacet-o-toluidide fib. dms., c.l., dlvd lb. .82 - —
fib dms., l.c.l. dlvd. ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd. . lb. .11 - —
dms., l.c.l., dlvd ..... lb. .12½- —
tanks, dlvd ..... lb. .08½- —
Acetonitrile, dms., c.l., works .. lb. .45 - —
dms., l.c.l., works ..... lb. .45¾- —
tanks, works ..... lb. .43 - —
Acetophenetidin, USP, 200-lb. dm., 1,000 lbs., frt. alld lb. 1.22 - —
100-lb dm., 1,000 lbs., frt. alld. lb. 1.24 - —
Acetophenone, cns., dms. ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .37 - —
dms., l.c.l., works ..... lb. .37¾- —
tanks, works ..... lb. .35 - —
N-Acetyl-p-aminophenol 1,000-lb. lots, frt. adjusted lb. 1.45 - —
smaller lots, dms., same basis lb. 1.55 - 1.65
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse. ..... lb. .24½- .30
Acetylsalicylic acid, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt lb. .63½- —
USP, standard, fine, cryst. gran., (20-40 mesh) powd., (80 mesh), 250-lb. bbls., c.l., t.l., same basis lb. .55¼- —
Freight equald. shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt alld. E. of Denver lb. .36½- —
tanks frt. alld. E. of Denver. lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS
Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 .55
Acrolein tech., dms., c.l., works lb. .51 - —
dms., l.c.l., works ..... lb. .51¾- —
tanks, works ..... lb. .46 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms. l.t.l. same basis .... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., frt. alld lb. .57 - —
dms., l.c.l., l.t.l., frt. alld lb. .58 —

Abies Siberica Oil—Ammonium Bicarbonate

Acrylonitrile, dms., c.l., t.l., frt. equald lb. .2949- .2950
dms., l.c.l., l.t.l., frt. equald lb. .3049- .3050
tanks, frt. equald. ..... lb. .2649- —
Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd. ..... lb. .32¼- —
bgs. l.c.l. dlvd. ..... lb. .35 - —
Agar USP Kobe No 1, strip bls. lb. 2.10 - —
powd., 30 mesh., fib. dms lb. 2.40 - —
dl-Alanine, dms., 100-lbs or more, f.o.b. works lb. 5.25 - —
dms. 1-99 lbs., same basis .. lb.10.00 - —
Aldol, 95%, dms., l.c.l. ..... lb. .28 - —
Aldrin, tech. fib. dms. c.l., t.l., dlvd lb. .99 - —
fib. dms., l.c.l., dlvd ..... lb. 1.04 - —

ALCOHOLS
Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs. ..... lb. 1.75 1.85
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250 lb. bbls., dlvd. E. of Rockies lb 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls, same basis. lb. 1.35 - —
Alkali blue prices 1c. higher W of Rockies
Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
Soln. 20% dms. 200-2,000 lb. lots, frt. alld lb 6.50 6.55
2½% dms. frt. alld. ..... lb. .95 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms. c.l. dlvd. ... lb. .32½- —
dms., l.c.l., dlvd ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb cbys., 55 to 990 lbs. works. lb. 1.57 - —
Allyl chloride, dms., c.l., dlvd. lb. .17½- —
dms., l.c.l., dlvd ..... lb. .19 - —
tanks, dlvd. ..... lb. .15 - —
Allyl isocyanate (see Mustard Oil, syn.).
Almond oil, artif. bitter (see Benzaldehyde)
Almond oil, nat., bitter f.p.a. bots. lb 2.75 3.45
NF, bots. ..... lb 3.00 3.30
sweet, USP, cns., dms. ..... lb. .70 1.30
Aloe, Cape, cs. ..... lb 35 .40
powd., cs. ..... lb .60 .65
Curacao kgs. ..... lb .60 .70
powd., kgs. ..... lb 80 —
Aloin USP bbls. dms. kgs. .. lb 3.25 3.75
Alphanaphthol (see a-Naphthol)
Alphanaphthylamine (see a-Naphthylamine)
Alphanitronaphthalene (see a-Nitronaphthalene)
Alphapicoline (see a-Picoline)
Alphaterpineol (see a-Terpineol)
Alphatocopherol (see a-Tocopherol)
Alum, ammonium, gran bgs., works 100 lbs 4.30 - —
lump, dms., works 100 lbs 5.05 - —
powd., dms., works .. 100 lbs 5.20 - —
USP, burnt dms. ..... lb 20 .21
hydrous dms. ..... lb 07¾ .08
Alum, potassium gran. bgs. works. 100 lbs 4.55 - —
lump, dms., works 100 lbs 5.30 - —
powd., dms., works .. 100 lbs 5.45 - —
USP, burnt., dms ..... lb 20 .21
hydrous dms ..... lb 07¾ .08
Alum, potash-chrome, dms. .. lb 17 —
Alumina calcined bgs c.l. works. lb 05 —
bgs. l.c.l., works lb 05¼ .08
Aluminum acetate, basic soln., 24%, bbls. l.c.l. works lb .14 —
Aluminum chloride, coml. anhyd., dms. c.l. works, frt equald lb 16 —
dms., l.c.l., works lb .16½- —
cryst., dms., c.l. works 100 lbs 21 00 —
dms., l.c.l. works 100 lbs 21 50 —
Soln., 32° cybs., c.l., works .. lb. .0495- —
cbys., l.c.l., works lb .0570- .1095
tanks works 100 lbs 3 95 —
NF, gran., dms., works lb 31 .32
Aluminum fluoride, tech. anhyd., bgs. c.l. works lb .17¼ —
bgs., l.c.l., works lb .18¼ .20¼
Aluminum fluoride in 6lb dms 0.35c per lb higher
Aluminum formate, basic soln., containers extra c.l., works. 100 lbs.11 00 - —
containers extra l.c.l. works 100 lbs.11.50 - —
Aluminum hydrate heavy, bgs., c.l., frt. equald lb. .03½- —
bgs. 20,000-40,000 lb lots, same basis lb. .03¾ —
bgs., 2,000-20,000 lb lots, same basis lb. .04¾ —
bulk, c.l., same basis lb. .03¼ —
Aluminum hydroxide, dried, USP XV, fib dms. works lb. .82½- —
fib dms., contract, works lb. 79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3 fib. dms., works lb. .22 —
9-9½% Al_2O_3 fib dms. works lb. .19 - —
fib dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate)
Aluminum metal, 99%+ ingots, 10,000-lb. lots, frt alld lb. .2680- —
pigs, 10,000-lb lots, frt alld lb. .2470- —
Aluminum oxide, amorphous (See Alumina, calcined)
Aluminum paste lining, extra-fine, dms lb. .69½- —
Standard grade, dms. lb. .47 - —
Aluminum powder, lining, extra-fine, dms lb 1.11 - —
Standard grade, dms lb .81 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb for 100-lb. dm., 1½c per lb for 50-lb dm. 3c per lb. for 10 lb. can and 5c. to 12c per lb for smaller containers. Deduct 1c. per lb for single shipment of 400 to 1,499 lbs., 2c for 1,500 to 4,999 lbs., 3c for 5,000 to 29,999 lbs and 4c for 30,000 lbs or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over
Aluminum resinate, precip., 2.1% t.t.l., dms lb. .36¼- —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton.41.00 - —
grd., bulk, c.l., same basis ton.40.00 - —
lump, bgs., c.l., same basis ton.44.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., dms., works .. lb. .30 - —
USP, powd., dms., works .. lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 - 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lb. 2.50 - —
p-Aminophenol, dms., frt. alld. . lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies ton.86.00 - —
refrigeration, tanks, works, frt. equald E. of Rockies ton.88.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton.89.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal. gray, bgs., c.l., works, frt, equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works ton.325.00 - —
dms., ton lots, ex whse. 100 lbs.20.40 - —
dms., smaller lots, ex whse. 100 lbs.21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works ..... 100 lbs. 9.00 - —

Abbreviations
Used in OPD Market Quotations

alld.	allowed
amorph.	amorphous
AMP	American melting point
anhyd.	anhydrous
AOAC	Association of Official Agricultural Chemists
a.p.a.	available phosphoric acid
approx.	approximately
artif.	artificial
ASTM	American Society for Testing Materials
Atl.	Atlantic
Be.	Baume
bbls.	barrels
bgs.	bags
bls.	bales
bots.	bottles
b.p.	boiling point
b.p.l.	bone phosphate of lime
b.r.	boiling range
bxs.	boxes
C.	centigrade
cbys.	carboys
CD	completely denatured
c.i.f.	cost, insurance, freight
cks.	casks
c.l.	carlots
cns.	cans
coml.	commercial
conc.	concentrated
CP	chemically pure
cps.	centipoises
cryst.	crystalline
cs.	cases
ctns.	cartons
cyls.	cylinders
d-	dextro
dbl.	double
denat.	denatured
dest-dist	destructively—distilled
dl-	dextrolaevo
dist.	distilled
distr.	distributor
djns.	demijohns
dlvd.	delivered
dms.	drums
dom.	domestic
E.	east
e.p.	end point
equald.	equalized
exp.	expressed
Ext.	external
F.	fahrenheit
ferment.	fermentation
f.f.a.	free fatty acid
f.f.c.	free from chlorine
fib.	fiber
f.o.b.	free on board
f.p.a.	free of prussic acid
frt.	freight
gal.	gallon
gran.	granular
grd.	ground
i.&a.	iron and aluminum
i.b.p.	initial boiling point
imp.	imported
incl.	included
indust.	industrial
kgs.	kegs
l-	laevo
lacq.	lacquer
lb.	pound
l.c.l.	less than carlots
l.t.l.	less truckload
liq.	liquid
mfrs.	manufacturers
m-	meta
m.a.p.	mixed aniline point
min.	minimum
m.p.	melting point
N-	nitrogen
n-	normal
nat.	natural
neut.	neutral
NF	National Formulary
NNR	New and Nonofficial Remedies
No.	number
nom.	nominal
o-	ortho
ord.	ordinary
oz.	ounce
p-	para
Pac.	Pacific
pf.	proof
phos.	phosphate
photo.	photographic
pkgs.	packages
powd.	powdered
precip.	precipitated
prod.	producer
pt.	point
pulv.	pulverized
purif.	purified
redist.	redistilled
refd.	refined
refy.	refinery
reg.	regular
resub.	resublimed
ret.	returnable
SD	specially denatured
s.d.	single distilled
S. E.	southeast
sec.	secondary
secs.	seconds
s.g.	specific gravity
shipt.	shipment
soln.	solution
s.u.	standard unit
syn.	synthetic
tanks.	railroad tankcars
tech.	technical
tert-	tertiary
t.l.	truck loads
t.w.	tank wagons
USP	U. S. Pharmacopoeia
vis.	viscosity
VM&P	varnish makers & painters
W.	west
whse.	warehouse
w w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material

Ammonium bichromate, dms., works	lb.	.42	.43
Ammonium bifluoride, dms. dlvd	lb.	.2145	.2245
Ammonium bromide NF dms., c.l., t.l., frt. equald	lb.	.44	—
dms., l.c.l., same basis	lb.	.46	—
Ammonium carbonate USP lump, dms., c.l	lb.	.15½	—
Ammonium chloride, tech., fine gran., bgs., c.l., works	100 lbs	5.75	—
bgs., l.c.l., works	100 lbs	7.75	8.20
USP, gran. fib dms.	lb.	.17¼	—
Ammonium citrate, dibasic, 250-lb. dm. t.o.b works	lb.	.77	—
Ammonium dichromate (see Ammonium bichromate).			
Ammonium fluoride (see Ammonium bifluoride).			
Ammonium gluconate, tech., 200-lb. dm. f.o.b. works E	lb.	.45	—
Ammonium hydroxide (see Ammonia aqueous)			
Ammonium iodide NF, 25-lb. jar, f.o.b. works	lb.	4.26	—
Ammonium lauryl sulfate, dms., c.l., frt. alld	lb.	.20½	—
dms., t.l.l., frt. alld	lb.	.21½	—
tanks, frt. alld	lb.	.19½	—
Ammonium lignin sulfonate bgs., c.l., works	100 lbs	3.25	—
bgs., t.c.l., works	100 lbs	3.40	3.65
Ammonium linoleate, 80%, dms., works	lb.	.50	.55
Ammonium molybdate, CP, cryst., fib dms. 15,000 lbs works	lb	1.22	—
fib dms 2,000-lb contracts, works	lb	1.23	—
single fib dms works	lb	1.24	—
Ammonium nitrate dom fertilizer grade, 33.5% N, bags, f.o.b works	ton	65.00	—
Imp. Canadian 33.5% N eastern, bgs. c.l. ship't point frt equald to $3 ton base price	ton	65.00	—
with dolomite, 20.5% N, bgs. c.l., Hopewell Va	ton	48.00	—
Ammonium oxalate, tech. fine gran. 250-lb dm f.o.b works E	lb.	28½	—
powd. 200-lb dm. same basis	lb.	28½	—
Ammonium pentaborate gran. bgs. c.l. works	ton	193 00	—
bgs., ton lots, ex whse 100 lbs.		14.23	—
bgs., smaller lots, ex whse 100 lbs.		15.48	-17.48
Ammonium pentaborate powder $10 per ton higher in bags			
Ammonium persulfate, tech., dms., 10-ton lots or more works	lb.	.18	—
dms. smaller lots works	lb.	.20	.23
Ammonium phosphate, comi., bgs., c.l. works, frt. equald	lb.	.09¼	—
bgs. t.c.l. same basis	lb.	.10	—
Ammonium phosphate, dibasic, NF V bbls dms	lb.	.46	—
Ammonium phosphate tech., bgs., c.l., works frt equald.	lb.	.09¼	—
bgs. t.c.l. same basis	lb.	.10	—
Ammonium silicofluoride, dms., works	lb.	.11¾	.13¼
Ammonium sulfamate bgs. c.l., t.l., works	lb.	.19	—
bgs t.c.l. works	lb.	.20½	.27
Ammonium sulfate standard granular bulk f.o.b works base price	ton	32.00	—
purif bgs f.o.b works	lb	08½	.15
Large granular bulk, c.l., works.	ton	35 00	—
bgs. c.l. works	ton	40 00	—
Tech. bulk c.l. t.l. works	ton	52.00	—
bgs. c.l., t.l., works	ton	56 00	—
bgs. l.c.l. t.l. works—100 lbs		3.20	7.20
Ammonium sulfide, liq., 40-44%, tanks frt. equald.,100% basis	ton	160.00	—
Ammonium sulfocyanide tech (see Ammonium thiocyanate)			
Ammonium thiocyanate, tech., cryst., dms c.l works	lb	.20	—
dms t.c.l. works	lb.	.22	.26
Tech., soln., 50%, tanks, frt. equald. basis ammonium thiocyanate content	lb.	.17¼	—
Ammonium thioglycollate coml., cbys., 100% basis	lb.	1.35	1.65
Highly purif., cbys 100% basis	lb	1.70	1.96
d-Amphetamine hydrochloride, di-basic bots	lb.	17.50	-23.00
dl-Amphetamine hydrochloride, di-basic bots	lb	4.50	6.00
d-Amphetamine hydrochloride, mono-basic dms	lb.	17.50	21.00
d-Amphetamine phosphate, fib dms., 100-lb lots	lb.	15 00	—
dl-Amphetamine phosphate, dms	lb	4.20	5.00
d-Amphetamine sulfate, fib dms.	lb.	15.00	-17.00
dl-Amphetamine sulfate, fib dms.,	lb.	4.20	5.00
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt alld E of Rockies	lb.	.18½	.19
dms., l.c.l. same basis	lb.	.20	.20½
tanks same basis	lb.	16	.16½
Amyl acetate, ex pentane, reg., dms., c.l dlvd	lb.	.19	—
dms., l.c.l., dlvd	lb.	.21½	—
tanks, dlvd.	lb.	.16½	—
tech., dms., c.l., dlvd	lb.	.17	—
dms l.c.l., dlvd	lb.	.18½	—
tanks dlvd.	lb.	.14½	—
Syn., oxo process, dms., c.l., dlvd.	lb.	.19	—
dms., l.c.l. dlvd	lb.	.20½	—
tanks, dlvd	lb.	.16½	—
Amyl alcohol, ex fusel oil (see Fusel oil refd.).			
Amyl alcohol, ferment. refd., 128°-132°C., dms., l.c.l., dlvd	lb.	.43½	—
refd ACS grade dms., l.c.l., dlvd	lb.	.45½	—
Amyl alcohol, ex pentane, mixed, amyls dms., c.l., frt. alld.	lb.	.19	—
dms., l.c.l. frt. alld	lb.	.20½	—
tanks, frt. alld	lb.	.16½	—
primary dms c.l., frt. alld.	lb.	.19¾	.20¼
dms., l.c.l. frt. alld	lb.	.21¼	.21¾
tanks, frt. alld	lb.	.17¼	.17¾
sec-synthetic, dms., c.l., works, frt. alld	lb.	.19	—
dms., l.c.l., works	lb.	.20½	—
tanks, works	lb.	.17	—
tert-synthetic, dms., c.l., frt. alld. E	lb.	.17	—
dms., l.c.l. frt. alld E	lb.	.18½	—
tanks, frt alld E	lb.	.14½	—
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works	lb.	.41½	—
dms., l.c.l., works	lb.	.43	—
tanks, works	lb.	.39½	—
Amyl alcohol, 2-pentanol, dms., c.l., works	lb.	.65	—
dms., l.c.l., works	lb.	.70	—
tanks, works	lb.	.60	—
Amyl n-butyrate, dms.	lb.	1.00	1.25
Amyl cinnamic aldehyde dms	lb.	1.75	2.20
p-tert Amyl phenol dms. c.l., works.	lb.	.26¾	—
dms c.l. works	lb.	.27¾	—
Amyl salicylate, cns., dms.	lb.	.73	1.08
Amyris oil dms	lb.	1.50	1.90
Anethole, tech., dms.	lb.	.92	1.00
USP, cns., dms.	lb.	1.12	—
Angelica root, bls.	lb.	.90	1.00
Angelica root oil, bots.	lb.	120.00	-140.00
Angelica seed oil, bots.	lb	120.00	-130.00
Aniline, dms., c.l., frt alld	lb.	.20	—
dms., t.c.l. frt. alld	lb	.21	—
tanks, frt alld	lb.	.18	—
Aniline oil (see Aniline).			
Aniline salt, dms., c.l., truckloads, 20,000 lbs. min. frt. alld.	lb.	.33	—
dms., t.c.l., same basis	lb.	.35	—
Anise oil, USP dms.	lb	1.75	3 00
Anise seed Mexican, bgs	lb	.22	—
Spanish, bgs.	lb	.19	—
Anisic aldehyde, dms.	lb.	1.55	2.20
o-Anisidine, dms. c.l., frt. alld	lb	.80	—
dms., t.c.l., same basis	lb.	.82	—
tanks, same basis	lb.	.78	—
p-Anisidine dms., works	lb.	.97	—
Anthracene 90-95%, dms., c.l., t.l., f.o.b., works	lb.	.42½	—
dms., t.c.l., minimum shipment 1,000 lbs., same basis	lb.	.45	—
Anthranilic acid 99% 150-lb dms., dlvd	lb.	1.15	—
Anthraquinone, 99.5% bbls., c.l., frt alld	lb.	.83	—
bbls., t.c.l., same basis	lb.	.86	—
Electrical grade, bbls., t.c.l., same basis	lb	1.10	—
Antimony butter (see Antimony trichloride).			
Antimony metal, bulk, c.l., mines.	lb.	.29	—
cs. c.l., mines	lb.	.29½	—
Antimony oxide bgs., c.l., frt. alld.	lb.	.24½	—
bgs. t.c.l., frt alld.	lb.	.26	—
Antimony sulfide, approx 65%, bgs., 10,000-lb. lots, dlvd	lb.	.23	—
bgs. smaller lots, dlvd	lb.	.24	.26
Antimony trichloride, anhyd., solid, pails, c.l., works	lb.	.41	—
pails, t.c.l., works	lb.	.43	—
Antimony-potassium tartrate, tech., powd., 250-lb. dm., f.o.b. works, E	lb.	.69½	—
USP, powd., 250-lb dm., same basis.	lb.	.74½	—
Antipyrine, NF, 200-lb bbls	lb.	3.50	—
Apomorphine hydrochloride, USP, 25-oz lots	oz.	35.60	—
Apricot kernel oil, USP, dms.	lb.	.70	1.25
Arabic gum, amber sorts, 10 bgs.	lb.	.29½	—
USP, powd., bbls.	lb.	.34½	—
Areca nuts, powd. bbls.	lb.	.13	—
Arecoline hydrobromide, NF, bots., tin	oz.	4.00	4.50
l-Arginine, free base, dms., 10-kilo lots or more	kilo.	90.00	—
l-Arginine glutamate dms., 10-kilo lots or more	kilo.	60.00	—
l-Arginine hydrochloride, dms., 10-kilo lots or more	kilo.	60.00	—
Arnica flowers (true Montana), bls	lb.	.75	—
Arsenic, crude (95%), bulk, c.l., works	lb.	.016	—
bbls., c.l., works	lb.	.031	—
Arsenic trioxide, USP dms	lb.	.48	—
Arsenic, white, powd. bbls., c.l., works	lb.	.04½	—
bbls. t.c.l. works	lb	.06½	.07½
Arsenous acid, tech (see Arsenic, white).			
Arsenous acid USP (see Arsenic trioxide).			
Arylid maroons, deep shades, bbls.	lb	3.70	—
Light shades, bbls.	lb	2.85	—
Asafetida gum cns	lb	36	40
Powd bbls dms	lb	75	.80
Asbestine (see Talc fibrous, New York)			
Asbestos, Canadian crude 6D c.l (30 tons) mines	ton	86 00	—
7D c.l (30 tons) mines	ton	75 00	—
7F c.l (30 tons) mines	ton	71 00	—
7H c.l (30 tons) mines	ton	61 00	—
7K c.l (30 tons) mines	ton	50 00	—
7M c.l (30 tons) mines	ton	44 00	—
7R, c.l. (30 tons) mines	ton	43 00	—
7RF c.l (30 tons) mines	ton	44 00	—
7T, c.l. (30 tons) mines	ton	41 00	—
7TF c.l (30 tons) mines	ton	44 00	—
Asbestos prices are in Canadian funds; l.c.l lots $4 per ton higher			
Ascorbic acid, USP 25, 50-kilo dms.,	kilo.	10.00	—
10 kilo dms	kilo	10 35	—
5-kilo dms.	kilo.	10 75	—
1-kilo bottle	kilo.	11 00	—
500-gram bottle	kilo.	11.50	—
Ash black (see Barium sulfide).			
Asphalt, gilsonite black jet, bgs., c.l., mines	ton.	40.00	—
ex-whse, N Y, N J	ton.	86 50	—
seconds, 300°-390°F fusing pt. bgs., c.l., mines	ton.	35.00	—
select, 350°F. fusing pt., bgs. c.l., mines	ton.	41.00	—
270°-295°F. fusing pt., bgs., c.l., mines	ton.	40.00	—
Manjak No. 10 crude, dms., works.	lb.	.07	—

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steam-refd, 50-80 penetration, tanks, tankwagon, refy ton 21.00 - —
85-300 penetration tanks tankwagon refy ton 20.00 - -
Aspirin (see Acetylsalicylic Acid)
Atropine NF tins oz 5.75 6.50
Atropine sulfate USP bots oz 5.25 5.75
Avocado oil, f.o.b Calif cns lb 2.25 3.00

B

Bacitracin, buk, 1,000,000,000 or more units 50,000 units .65 - —
less than 1,000,000,000 units 50,000 units .70 - —
Balm of Gilead buds dried bgs lb 1.25 1.35
Barberry root bark, bgs. lb .50 - —
Barbital, NF 100-lb dms. lb 4.56 - —
Barbital sodium NF dms lb 4.75 - —
Barium carbonate, precip., bgs, c.l., works ton 111.50 - —
ogs. smaller lots, works ton 126.50 - —
Barium chlorate, dms. works lb .32 .41
Barium chloride, anhyd., bgs., c.l., works ton 176.00 - —
bgs. t.c.l., works ton 196.00 - —
Barium chloride, NF cryst., 100 lb dms lb .22 - —
Tech cryst. bgs. c.l. works 100 lbs 7.00 - —
bgs., t.c.l., works 100 lbs 8.00 - —
Barium chromate bgs frt equald lb .38 - —
Barium dioxide (see Barium peroxide)
Barium hydrate, cryst. ogs. c.l. t.l., frt equald ton 208.00 - —
bgs. t.c.l. t.l.t. frt equald ton 218.00 - —
Barium monohydrate, 99% bgs., c.l frt equald 100 lbs 11.25 - —
bgs., t.c.l., frt equald 100 lbs 11.75 - —
Barium monoxide (see Barium oxide)
Barium nitrate bbls. c.l. t.l. dlvd lb .16 - —
bbls. t.c.l., t.t.l., dlvd lb .17 - —
Barium oxide grd., dms. c.l. t.l., frt equald ton 275.00 - —
dms. t.c.l., t.t.l., frt. equald. ton 285.00 - —
Barium peroxide dms. frt equald. lb .20 - —
Barium stearate ctns. c.l. frt alld. lb .41 - —
ctns. t.c.l., same basis lb .42 - .46
Barium sulfate, tech (see Barytes and blanc fixe)
Barium sulfate, X-ray, 100-lb dm.lb. .19½- —
Barium sulfide dms. c.l., works ton 100.00 - —
dms. t.c.l., works ton 110.00 - —
Barytes, southern off-color, bgs. mines ton 25.00 - —
95-75%, bgs., mines ton 25.00 - —
white water-grd., paper bgs. c.l. St Louis ton 55.00 -55.25
paper bgs. ex whse., New York ton 79.85 - —
Battery acid, cbys c.l. works, E 100 lbs 2.35 - —
cbys., t.c.l., works, E 100 lbs 2.65 -10.95
Bauxite, bulk mines ton 7.00 -10.00
Bay oil NF Puerto Rican 50-55% cns lb 2.25 2.75
55-60% cns lb 2.50 3.05
NF, West Indian, 50-55%, cns., dms lb. 2.35 - —
Bayberry wax, bgs lb. .45 - .50
Beeswax, crude, African, bgs lb. .53 - .55
Brazilian, bgs. lb. .58 Nom.
Central American, bgs lb. .55 Nom.
Chilean, bgs. lb. .59 Nom.
Refd, USP bleached white, bricks 100-lb ctns lb .69 - .71
white, slabs, 100-lb. ctns lb. .68 - .70
yellow, bricks, 100-lb. ctns lb. .59 - .61
yellow, slabs, 100-lb. ctns lb. .58 - .60
Belladonna leaf, bls. lb. .26 - —
Belladonna root, bls. lb. .28 - —
Bentonite, dom 200 mesh, bgs., c.l., mines ton 14.00 - —
Imp Italian, white high gel. bgs., 5-ton lots, ex whse ton 95.20 - —
bgs., 1-ton lots, ex whse ton 99.00 - —
Imp., Italian, white low gel., bgs., 5-ton lots ex whse ton 93.40 - —
bgs., 1-ton lots, ex whse ton 97.16 - —
Benzal chloride cbys., works lb .44 - —
Benzaldehyde, NF, dms lb. .80 - 1.05
Tech., dms., c.l., t.l. lb. .47 - —
dms., l.c.l. lb. .48 - —
Benzene, coaltar, pure or nitration, tanks, works:
Bethlehem, Pa. gal. .31 - —
Birmingham district gal. .31 - —
Chicago district gal. .31 - —
Cleveland district gal. .31 - —
tanks, works:
Geneva, Utah gal. .31 - —
Johnstown, Pa. gal. .31 - —
Lackawanna, N. Y. gal. .31 - —
Lone Star, Tex. gal .31 - —
Lorain, Ohio gal. .31 - —
Middletown, Ohio gal. .31 - —
Minnequa, Colo. gal. .31 - —
Philadelphia district gal .31 - —
Pittsburgh district gal. .31 - —
Sparrows Point, Md. gal. .31 - —
Syracuse, N. Y. gal. .31 - —
Terre Haute, Ind. gal. .31 - —
Youngstown, Ohio gal. .31 - —
Benzene, petroleum, nitration or industrial, Houston, Tex., tanks, gal. .31 - .40
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, dms., c.l., dlvd., gamma unit-lb. .00825- —
dms., t.c.l., works gamma unit-lb. .009 - .0095
low gamma, dms., c.l. dlvd. gamma unit-lb. .00825- —
dms., t.c.l., works gamma unit-lb. .009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., t.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls. dlvd lb. 2.30 - —
AAOT, bbls., dlvd. lb. 2.55 - —
Lightfast, bbls., dlvd. lb. 3.40 - —
Benzocaine, dms. lb. 3.48 - 3.50
Benzoic acid, tech., bbls., dms., c.l., t.l., frt., alld lb. .37 - —
bbls., dms., ton lots, same basis lb. .41 - —
bbls., dms., 1,000-lb. lots, same basis lb. .43 - —
USP, bbls., dms., ton lots lb. 48 - —
bbls., dms., 1,000-lb. lots lb. .50 - —

BENZOL
Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum Sumatra cs. lb. .33 - —
Benzophenone, dms. lb. 1.40 - 1.65
Benzotriazole tech. dms., 1,000-lb. lots, works lb 2.25 - —
Benzotrichloride, cbys. 1,000-lb. lots or more, frt., equald lb .21 - —
cbys, smaller lots, frt. equald lb .23 - —
Benzoyl chloride, cbys. dms., c.l., works, frt., equald lb .22 - —
cbys., t.c.l. same basis lb .23 - —
tanktrucks, dlvd Metropolitan area lb .21 - —
Benzoyl peroxide, purif. fib dms., 50 to 1,000-lb lots works lb .98 1.08
Benzyl acetate t.f.c. cns. dms lb .58 .79
Benzyl alcohol NF, dms lb. .58 .80
Tech. dms., dlvd lb. 47½ .65
Benzyl benzoate USP NF, 40-lb. dms lb. .68 —
Benzyl chloride, tech., cbys. dms., c.l., works, frt., equald lb. .22½- .25½
cbys., dms. t.c.l., same basis lb 23½ 25½
tanktrucks, dlvd. Metropolitan area lb .21 —
A 2½c differential is quoted on benzyl chloride in 5-gal cbys. In steel dms prices are ½c lower
Benzyl cinnamate, cns. lb. 3.30 - 3.60
Benzyl dimethylamine dms. works lb 2.25 —
Benzyl formate cns lb 1.85 2.10
Benzyl isoeugenol, cns lb 9.25 —
Benzyl propionate bots lb 1.35 1.65
Benzyl salicylate bots lb 1.60 1.85
Benzylidine acetone bots. lb 1.75 1.80
Benzylidine chloride (see Benzal chloride).
Berberin bisulfate cns lb 48.50 - —
Berberine hydrochloride bots lb 48.50 —
Bergamot oil nat NF Italian cns lb. 12.60 -14.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid)
Betaoxynaphthoic acid (see b-Oxynaphthoic acid)
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol)
Betanaphthylamine (see b-Naphthylamine)
Betaphenylethylamine (see b-Phenylethylamine)
BHC (see Benzene hexachloride tech.).
Biotin, cryst. bots gram 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil crude cns. lb 1.50 1.90
Rectified, cns. lb 1.75 2.00
Bismuth chloride, tars lb 5.11 —
Bismuth hydroxide dms. lb 4.60 4.65
Bismuth metal, bxs. ton lots lb 2.25 —
Bismuth nitrate cryst. dms lb 2.08 2.17
Bismuth oxide, anhyd., 100-lb. dm., f.o.b works lb. 4.42 - —
Bismuth oxychloride 25-lb dm., f.o.b works lb 4.42 - —
Bismuth subcarbonate USP dms.lb 3.20 - —
Bismuth subgallate, NF, 200-lb. dm. f.o.b works lb 3.15 - —
Bismuth subiodide, NF, fib dms lb 5.37 - —
Bismuth subnitrate NF, 200-lb. dm., f.o.b. works lb. 2.65 - —
Bismuth subsalicylate, USP 100-lb. dm., f.o.b works lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd. jars lb 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt, 70,000-lbs or more, frt alld lb .29½- —
bgs., c.l., t.l. less than 70,000 lbs., same basis lb. .30 - —
bgs. t.c.l. same basis lb 31 - —
Blackberry root bark bls. lb .50 .55
Black haw root bark bls. lb .63 .65
Black haw tree bark bls lb 45 50

BLACK PIGMENTS
Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs c.l. works ton 145.00 - —
bgs., t.c.l., works ton 155.00 - —
bgs. t.c.l. New York whse ton 195.00 - —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton. 5.00 - —
high-grade, unground, 16-17% ammonia, bgs. Chicago unit-ton. 5.50 - —
Bloodroot, bls. lb. .90 - 1.00

BLUE PIGMENTS
Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian dms lb 1.90 2.55
Peruvian dms lb 1.80 2.25
BON acid maroons, pure, bbls lb 1.75 —
Resinated bbls. lb 1.50 —
Bone black dms. t.c.l frt. alld lb. .18 - .22¾
Pacific coast bone black prices 2c. per lb higher
Bonemeal, steamed, works, E ton 75.00 - —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip (see Calcium phosphate, tribasic)
Borax, tech., anhyd, 99½%, bgs., c.l., works ton 92.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.42 - —
bgs., smaller lots, same basis 100 lbs 8.67 -10.67
bulk, c.l., works ton 83.00 - —
gran., decahydrate, 99½% bgs., c.l., works ton 50.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 5.32 - —
bgs., smaller lots same basis, 100 lbs. 6.57 - 8.57
bulk, c.l., works ton 43.50 - —
gran., pentahydrate, 99½%, bgs., c.l. works ton 64.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.05 - —
gran., pentahydrate, 99½%, bgs., smaller lots, same basis 100 lbs. 7.30 - 9.30
bulk, c.l., works ton 58.00 - —
Borax, USP, powd., bgs., c.l., works, ton 54.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 6.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.70 - 9.70
Bordeaux powder, tribasic bgs., c.l., dlvd lb .24 - —
bgs., t.c.l., same basis lb. .26 - —
Boric acid, tech, anhyd, 99.9% bgs., c.l. works ton 335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 19.62 - —
bgs., smaller lots same basis, 100 lbs. 20.87 -22.87
cryst., 99.9%, bgs., c.l., works ton 163.50 - —
bgs., ton lots ex whse, New York or Chicago 100 lbs. 11.05 - —
cryst., 99.9%, bgs., smaller lots, same basis 100 lbs. 12.30 -14.30
dms., c.l. works ton 188.50 - —
dms., ton lots, ex whse., New York or Chicago, 100 lbs. 12.30 - —
bgs., smaller lots, same basis 100 lbs. 13.05 - —
gran., 99.9% bgs. c.l. works, ton 112.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 8.47 - —
bgs., smaller lots same basis, ton 174.25 - —
dms., c.l. works ton 137.00 - —
dms., ton lots, ex whse, New York or Chicago 100lbs. 9.72 - —
dms., smaller lots same basis 100 lbs. 10.47 - —
bulk, c.l., works ton 106.00 - —
powd., bgs., ton lots ex whse, New York or Chicago, 100 lbs. 8.85 - —
bgs., smaller lots, same basis, 100 lbs. 10.10 -12.10
dms., smaller lots, same basis 100 lbs. 11.45 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb 1.25 - —
100-lb. cyls. works lb. 1.70 - —
Boron trifluoride, gas, cyls, t.l., works lb. .70 - —
cyls., t.t.l., works lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls lb. 1.53 - —
Bromine purif. cs. c.l., t.l., dlvd. E of Rockies lb. .32 - —
cs., t.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
ret. dms., t.c.l., same basis lb. .31 .34
tanks, same basis lb. .21½- —
Bromochloromethane dms., c.l., frt. equald lb. .48 - —
dms., t.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb cbys lb 1.80 1.90
Bromstyrol, bots. lb 5.45 5.70
Brucine, cns oz. 1.50 1.75
Brucine sulfate, NF cns oz. 1.50 1.75
Buchu leaves, bls lb. .75 - .80

BROWN PIGMENTS
Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

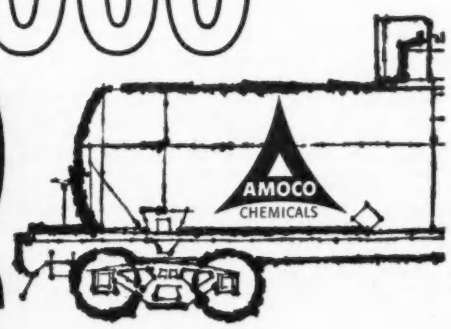
Butadiene, refd cyls., c.l., refy lb. .21 - —
cyls., t.c.l. refy lb. .22 - —
tanks, dlvd. lb. .14½- —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., t.c.l., same basis lb. .18½- —
tanks, same basis lb. .14½- —
Syn., dms., c.l., dlvd, E lb. .17 - —
dms., t.c.l., same basis lb. .18½- —
tanks, same basis lb. .14½- —
sec-Butyl acetate, syn. dms., c.l., dlvd.E lb. .14¾- —
dms., t.c.l., same basis lb. .16¼- —
tanks, same basis lb. .12¼- —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E. lb. .42½- —
dms., t.t.l., same basis lb. .43½- —
tanks, same basis lb. .40 —
Prices of n-butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev, Ore., Utah and Wash.
n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .17½- —
dms., t.c.l., frt. alld lb. .19 - —
tanks, frt. alld lb. .15 - —
n-Butyl alcohol, syn., dms., c.l., dlvd lb. .17½- —
dms., t.c.l., frt. alld lb. .19 - —
tanks, dlvd. lb. .15 - —
Butyl alcohol, sec-synthetic, dms., c.l. dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .12½- —
Butyl alcohol, tert-synthetic dms., c.l., frt alld dlvd. E lb. .15 - —
dms, t.c.l. same basis lb. .16½- —
tanks, same basis lb. .12½- —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms. c.l. works lb. .37½- —
dms. t.c.l. works lb. .38¼- —
n-Butyl ether dms. c.l., works lb. .35¼- —
dms., t.c.l. works lb. .36 - —
tanks, works lb. .33¼- —
Butyl lactate dms. c.l., frt alld E. of Rockies lb. 42½- —
dms., t.c.l. same basis lb. .43½- —
tanks, same basis lb. .40 - —
Butyl laurate dms. works lb. .37½- —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms., t.c.l., works lb. .55½- —
Butyl oleate, refd., dms., t.c.l., works lb. .32 - —
Butyl phenylacetate, dms., lb 4.50 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms. c.l., frt. alld. E of Mississippi lb. .27¼- —
dms. t.c.l. same basis lb. .28¼- —
Butylamine (see Mono-, Di- and Tributylamine)
6-tert-Butyl-m-cresol (see mono-tert-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs., c.l., dlvd. lb. .27½- —
bgs., t.c.l., works lb. .28½- —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., t.c.l., dvld. lb. .23½- —
tanks, dlvd lb. 19½- —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., t.c.l., same basis lb. .34½- —
tanks, same basis lb. .32½- —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt alld, E. of Rockies lb. 5.45 - —
Light shade, bbls same basis lb. 4.55 - —
Medium shade, bbls., same basis, lb. 5.20 - —
Medium light shade bbls., same basis lb. 4.80 - —
Orange-red shade, bbls., same basis lb. 4.20 - —
Yellow all shades, bbls, frt. alld. E. of Rockies lb. 3.75 - —
Cadmium iodide, 25-lb fib dms. lb 6.75 7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd lb. 1.30 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E. of Rockies lb. 1.58 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb. 1.88 - —
Red, light shade bbls. same basis, lb. 1.65 - —
Red, medium shade bbls. same basis lb 1.80 - —
Cadmium-mercury lithopone red, medium light shade, bbls., same basis lb 1.73 - —
Red, maroon shade bbls., same basis lb 1.96 - —
Cadmium selenide lithopone maroon, bbls. frt alld E of Rockies, lb. 2.72 - —
Maroon, dark shade bbls. same basis lb. 2.74 - —
Orange, bbls., same basis lb. 1.54 - —
Cadmium-selenide lithopone red, orange-red shade bbls. same basis lb. 1.68 - —
Red, dark shade, bbls. same basis lb. 2.52 - —
Red, light shade bbls. same basis lb. 1.84 - —
Red, medium-light shade bbls., same basis lb. 1.96 - —
Red, medium shade bbls. same basis lb. 2.19 - —
Cadmium-selenide, lithopone yellow, all shades, bbls. frt alld. E. of Rockies lb. 1.15 - —
Caffeine, NF citrated, ums. 100-lb. lots or more lb. 2.70 - —
USP nat., cryst., anhyd., dms., 100-lb lots or more lb. 2.10 - —
cryst. hydrous dms., 100-lb. lots or more lb. 1.96 - —
Syn., cryst., anhyd. dms., 100-lb ots or more lb 2.10 - —
cryst. hydrous, dms., 100-lb. lots or more lb. 1.96 —
Cajuput oil, native cns lb 1.75 2.55
Redist. USP cns lb 1.90 2.10
Calamine, USP dms. lb .34 —
Calamus oil, bots lb. 12.00 -20.00
Calciferol cryst. 10-kilo or more lots, works gram .54 - —
1-10 kilo lots gram 55 - —
Calciferol in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate fib dms. 100 lbs. or more, frt adjusted lb 3.10 - —
Calcium arsenate dealers, bgs., c.l., frt alld lb. .09 - .09¼
bgs., t.c.l., same basis lb. .10 - .10½
Calcium bromide NF 100 lbs or more lb. .97 - —
Calcium carbide, standard generator size, 600-lb dms. c.l., dlvd ton 149.00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs. c.l., works ton 10.50 - —
chalk, whiting 325 mesh, bgs., c.l., works ton 32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton 30.00 —
10 to 20 microns, bgs., c.l., works ton 17.00 -18.00
Precip., dense, bgs. c.l., works, ton 30.00 -35.00
bgs., t.c.l., works ton 45.00 -50.00
medium, bgs. c.l., works ton 38.00 —
bgs., t.c.l. works ton 48.00 —
surface treated, bgs. c.l. works, ton 40.00 -42.00
bgs. t.c.l., works ton 55.00 -57.00
ultrafine, bgs., c.l., works, ton 117.50 -167.50
bgs. t.c.l., works ton 137.50 -187.50
Calcium chloride, flake, 77-80%, paper bgs. c.l., works, frt. equald ton 31.00 - —
Conc., flake or pellet, 94-97%, paper bgs., c.l., works, frt. equald ton 37.80 - —
Liquor, 40% tanks, frt equald ton 12.50 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton 37.00 - —
Purif., gran. dms lb 27 - —
Solid, 73-75% dms. c.l., frt. equald ton 29.50 - —
dms. t.c.l., works, frt. equald ton 36.00 -73.00
USP gran. dms. lb .32 —
Calcium chromate, bgs., dlvd lb. .37 - —
Calcium cyanide, dms. c.l., dlvd. E. of Rockies lb. .20 - —
dms. t.c.l. same basis lb. .24 - .55
Calcium cyclamate 100-lb dms lb. 1.95 —
Calcium gluconate, USP powd., 150-lb dm., ton lb. .66½- —
AA, 150-lb. dm. ton lb. .73½- —
Calcium hydride, lump dms. works, lb. 2.20 3.00
Calcium hypochlorite, high test, 45-lb cs., dlvd. E. of Rockies cs. 22.95 -25.10
100-lb dms. same basis dm. 30.80 -34.50
Calcium hypophosphite dms., 1,000-lb lots lb. 1.28 - —
Calcium iodide, jars lb. 4.52 - —
Calcium lactate, NF dms., 10,000-lb. lots or more, works lb. .36 - .40
dms., smaller lots, works lb. .41 - .46
Calcium mandelate, USP, 150-lb. dm, works lb. 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms frt equald lb .30 - —
Calcium pantothenate, 1-kilo or more, kilo. 35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate)
Calcium phenolsulfonate dms lb. 1.24 - 1.25
Calcium phosphate, dibasic, USP, bgs. c.l., frt equald 100 lbs. 8.25 - —
Calcium phosphate, dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton 83.25 -86.00
bgs. c.l., t.l. f.o.b. Texas City works ton 77.70 —
bgs., l.c.l., frt. equald ton 93.25 -96.00
21% P., bgs., c.l., t.l., frt equald ton 97.65 - —
bgs., l.c.l., frt. equald ton 107.65 - —
Prices of calcium phosphate dibasic in bulk $1 per ton less than bg., c.l. prices
Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald, 100 lbs. 7.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.95 - —
Calcium phosphate, tribasic NF, precip., bgs. c.l., works, frt. equald 100 lbs 9.25 - —
bgs., l.c.l., frt. equald 100 lbs. 10.00 - —

Calcium phytate bgs., 50 lbs. or more, f.o.b. warehouse N. Y.	lb.	.39	—
Calcium resinate precip, dms. ton lots, frt. alld., works	lb.	.36¼	—
Calcium silicate, hydrated, bgs., c.l., works	lb.	.06	—
bgs., l.c.l., works	lb.	.06½	—
Calcium silicate, paint grade (see Wollastonite)			
Calcium stearate, ctns. c.l.	lb.	.39	—
ctns., l.c.l.	lb.	.40	.44
Calcium sulfate (see Gypsum)			
Calomel NF X, powd. 100-lb dms.	lb.	5.42	—
Camphene 46° m.p. dms incl., c.l., works	lb.	.15	—
dms. incl., l.c.l. same basis	lb.	.16½	—
tanks, same basis	lb.	.12½	—
Camphene, chlorinated 67-69% (see Toxaphene)			
Camphor, monobromated, NF, dms., kgs	lb.	3.63	3.70
Camphor, nat., USP, powd., cs., 100-lb. lots	lb.	.60	.65
tablets, 1-oz. cs.	lb.	.85	.90
USP, gran., bbls., 2,000-lb. lots	lb.	.59	—
Syn., USP gran., powd., bbls., 1,000-lb. lots	lb.	.60	—
bbls. smaller lots	lb.	.61	—
tablets, ctns., 1,000-lb. lots	lb.	.85	—
ctns. 500-lb. lots	lb.	.86	—
ctns. smaller lots	lb.	.87	—
tech. 1 bbl or more	lb.	.48	—
Camphor oil, sassafrassy, dms.	lb.	.35	.55
White dms	lb.	.26	.50
Cananga oil native, cns.	lb	6.50	7.00
Rectified, cns.	lb.	7.25	-10.00
Candelilla wax crude, bgs.	lb	.53	.54
Refd., bgs.	lb.	.57	.59
Powdered Candelilla wax 20 to 100 mesh, 8c higher			
Cantharides, Chinese, cs.	lb.	1.25	—
powd. bxs.	lb	1.75	—
Russian, bgs.	lb.	2.25	—
powd., bxs.	lb.	2.75	—
Capric acid, dms	lb.	.35½	.38
tanks	lb.	.33	—
Caprył alcohol, 85% dms., c.l., and t.l., works	lb.	.19	—
dms., t.t.l. same basis	lb.	.19½	—
tanks, frt. equald	lb.	.16½	—
Sec 92-99% dms., c.l.	lb.	.22	—
dms. l.c.l	lb.	.23	—
tanks	lb.	.19½	—
Caprylic acid, dms	lb.	.35½	.38
tanks	lb.	.33	—
Capsicum (see Pepper red)			
Capsicum oil (see Capsicum oleoresin).			
Capsicum oleoresin NF, from dom pepper, dms	lb.	4.00	—
NF, from African pepper, dms.	lb.	4.50	—
Caraway oil, dms	lb.	3.00	3.25
Caraway seed, Danish, bgs	lb.	.12¼	—
Dutch, bgs.	lb.	.13	—
Polish, bgs.	lb.	.12	—
Carbazole, 97%, bbls., ton lots, works	lb.	1.05	—
Carbon black, channel, rubber beads, bulk, c.l., works	lb.	.07¼	—
bgs., c.l., works	lb.	.07¾	—
bgs., l.c.l., works	lb.	.15½	—
Carbon black furnace fast extruding, bgs., c.l. works	lb.	.06¾	—
ctns. l.c.l. whse	lb.	.13½	—
high abrasion, bulk, c.l., works.	lb.	.07¼	—
bgs., c.l. works	lb.	.07¾	—
bgs., l.c.l., dlvd. or whse	lb.	.14½	—
high modulus bgs. c.l., works.	lb.	.06¼	—
ctns., l.c.l., whse.	lb.	.13	—
semi-reinforcing, bgs., c.l., works.	lb.	.05¾	—
bgs., ctns. l.c.l. whse.	lb.	.12½	—
Carbon black pigment, high color beads, ctns., c.l., works	lb.	.72	—
ctns. l.c.l., dlvd. or whse	lb.	.79	—
medium color, uncompressed, bgs., c.l., works	lb.	.13½	—
bgs., l.c.l., dlvd or whse	lb.	.22	—
Carbon dioxide, indust. wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E.	ton.	60.00	-115.00
bulk, 3,000,000 lbs. of more, dlvd., Metropolitan areas, E.	ton.	55.00	—
Solid, bulk, wholesale, works	ton.	85.00	—
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points	lb.	.071	—
55-gal. dms., l.c.l., same basis	lb.	.086	.091
5-gal. dms., 30 dms to c.l., same basis	lb.	.131	—
5-gal. dms., less than 30 dms., same basis	lb.	.161	—
tanks, dlvd.	lb.	.0545	—
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld	lb.	.12¾	—
dms., l.c.l., frt. alld.	lb.	.15¼	—
Carbon tetrachloride, tech., consumers dms. c.l. t.l., frt. alld.	lb.	.11¾	—
dms., l.c.l., t.t.l., frt. alld.	lb.	.14¼	—
tanks, frt. alld	lb.	.10¾	.11¼
Carboxymethyl cellulose (see CMC).			
Carbromal, NF, dms., 100-lb. lots, works	lb.	4.00	4.25
dms smaller lots, works	lb.	4.10	4.75
Cardamom oil, NF, bots.	lb.	40.00	-47.50
Cardamom seed, bleached "A"	lb.	2.95	—
Bleached "B"	lb.	2.95	—
Decorticated Alleppey, cs.	lb.	2.85	—
Guatemala, cs.	lb.	2.85	—
Green, Alleppey, bgs.	lb.	2.00	—
Ceylon, bgs.	lb.	2.00	—
Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd.	lb.	16.80	—
bulk, smaller lots, dlvd.	lb.	16.90	-17.30
Carnauba wax, chalky, bgs., ton lots	lb.	.73	.75
North country, No. 2, crude, bgs., ton lots	lb.	.84	.85
refd., pure, ton lots	lb.	.94	.95
North country, No. 3, Ceara, crude, bgs., ton lots	lb.	.76	.78
Ceara, refd., pure, bgs., ton lots	lb.	.85	.86
Parnahyba, crude, bgs., ton lots	lb.	.78	.79
Parnahyba, refd., pure, bgs., ton lots	lb.	.85	.86
Yellow, No. 1, Ceara, bgs., ton lots	lb.	1.16	1.18
Parnahyba, bgs., ton lots	lb.	1.16	1.18
Powdered carnauba wax, 20 to 100 mesh, 8c. higher.			
Carotene tech., 1,350,000 A units per gram, tins 5-10 kilo lots, dlvd	gram.	.24½	—
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works	million units.	.12	—
USP, microcrystalline in oil, 400,000 A units per gram, dms., dlvd	million units.	.174	—
b-Carotene in vegetable oil, semi-solid suspension, 400,000 A units per gram cns	kilo.	57.60	—
Liquid in vegetable oil, 500,000 A units per gram cns	kilo.	72.00	—
Pure, cryst., 1,600,000 to 1,670,000 A units per gram., cns.	kilo.	240.00	—
Carvol, bots	lb.	5.00	5.40
Cascara sagrada, bark, bulk	lb.	.34	.36
Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works	lb.	.56	—
edible, acid, precip., 80 mesh, bgs., 10,000-lb lots or more, works	lb.	.84	—
Casein, imp., inedible, acid-precip., grd., Argentine, bgs., c.l., ex-dock, Eastern seaports	lb.	.21½	.22
New Zealand, bgs., c.l., same basis	lb.	.25	—
Cashewnut shell oil, treated dms., c.l., Newark, N. J.	lb.	.22	—
dms., ton lots, same basis	lb.	.23	—
dms., dm lots, same basis	lb.	.25	—
Cassella acid, dms., frt. alld., 100% basis	lb.	1.44	1.75
Cassia, Padang, "A," bls.	lb.	.30	—
"B," bls.	lb.	.29	—
"C," bls.	lb.	.28	—
Korintje "A," bls.	lb.	.29	—
"B," bls.	lb.	.28½	—
"C," bls.	lb.	.27½	—
Cassia oil (see Cinnamon leaf oil, USP).			
Castor oil, dom., blown, dms., c.l.	lb.	.2550	—
dms., l.c.l.	lb.	.2650	—
dehydrated, bodied, dms. c.l.	lb.	.2700	—
dms., l.c.l.	lb.	.2850	—
tanks	lb.	.2500	—
dehydrated, unbodied, dms., c.l	lb.	.2500	—
dms., l.c.l.	lb.	.2660	—
tanks	lb.	.2360	—
hydrogenated, bgs., c.l.	lb.	.2450	—
bgs., ton lots	lb.	.2850	—
bgs., l.c.l. dlvd	lb.	.3050	—
No. 1, dms., c.l.	lb.	.2150	—
dms., l.c.l.	lb.	.2250	—
tanks	lb	.1950	—
No. 3, tech., dms., c.l.	lb.	.2125	—
dms., l.c.l.	lb	.2225	—
tanks	lb	.1925	—
refd., deod., dms., c.l.	lb.	.2650	—
dms., l.c.l.	lb.	.2750	—
Castor oil, dom., USP, dms., c.l.	lb.	.2350	—
dms., l.c.l.	lb	.2450	—
tanks	lb	.2150	—
Imported, No. 1, Braz., tanks	lb.	.17½	—
Castor oil, sulfonated 50% dms., works	lb.	.15	.15¼
75%, dms., works	lb.	.19	.19½
Castor oil acids, dehydrated, dms.	lb	44¼	.46¼
Split dms.	lb	37¼	.38¼
Castor pomace, bgs. c.l., works	ton	35.00	—
Castoreum, nat, cns.	lb	5.25	—
Syn. cns.	lb	9.00	—
Catechol, CP, cryst., fib., dms. works	lb.	2.17½	—
Resub., dms., works	lb	4.29½	—
Catnip leaves, Southern, bls	lb.	.65	.75
Caustic potash (see Potash caustic).			
Caustic soda (see Soda caustic)			
Cedarleaf oil USP XIII cns. dms	lb.	2.50	3.10
Cedarwood oil, cns., dms.	lb	.51	.65
Celery seed, French, bgs	lb	.33	—
Indian, bgs.	lb	.19	—
Cellulose acetate, flake, powd., bgs. ctns., 100-lb lots or more, dlvd. E	lb.	.35	.45
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd E	lb.	.545	.555
27% butyryl content, bgs. dlvd. E	lb.	.595	.605
38% butyryl content, bgs., dlvd. E	lb.	.545	.555
Cellulose acetate-butyrate, powd., 38% butyryl content halt-second, bgs. dlvd E	lb	545	555
50% butyryl content bgs dlvd. E	lb	585	595
Cellulose gum methyl (see Methyl Cellulose)			
Cellulose gum pure high vis bgs., 23,000 lb lots or more works frt alld	lb	57	—
bgs. smaller lots same basis	lb	59	—
Cerium chloride 46% dms dlvd	lb	25	—
Cerium hydrate 74% CeO fib dms, 100-lb lots or more	lb	1.40	—
77% CeO fib dms 100-lb lots or more	lb	1.74	—
Cerium oxalate (see Rare earth oxalate)			
Cerium oxide, optical grade, bgs. 50-lb lots or more dlvd	lb	1.85	1.90
bgs. smaller lots dlvd	lb	1.95	—
Cetyl alcohol NF fib cns. c.l., t.l. dlvd. E	lb	41½	—
fib cns. t.c.l., same basis	lb	43½	—
tanks, same basis	lb	39	—
NF, special, fib. cns., c.l., t.l., dlvd. E	lb.	.48½	—
fib cns., t.c.l., same basis	lb	50½	—
tanks, same basis	lb	46	—
Chalk (see Calcium carbonate)			
Chamomile flowers, Hungarian bls.	lb.	1.25	—
Roman, cs.	lb.	1.50	1.70

AMOCO OXO ALCOHOLS



HIGHEST ESTERIFICATION QUALITY

Amoco Isooctyl and Decyl Alcohols are triple checked for quality by:

1. High temperature esterifications with phthalic anhydride.
2. Acid color with concentrated sulfuric acid.
3. Esterification color after heat-aging.

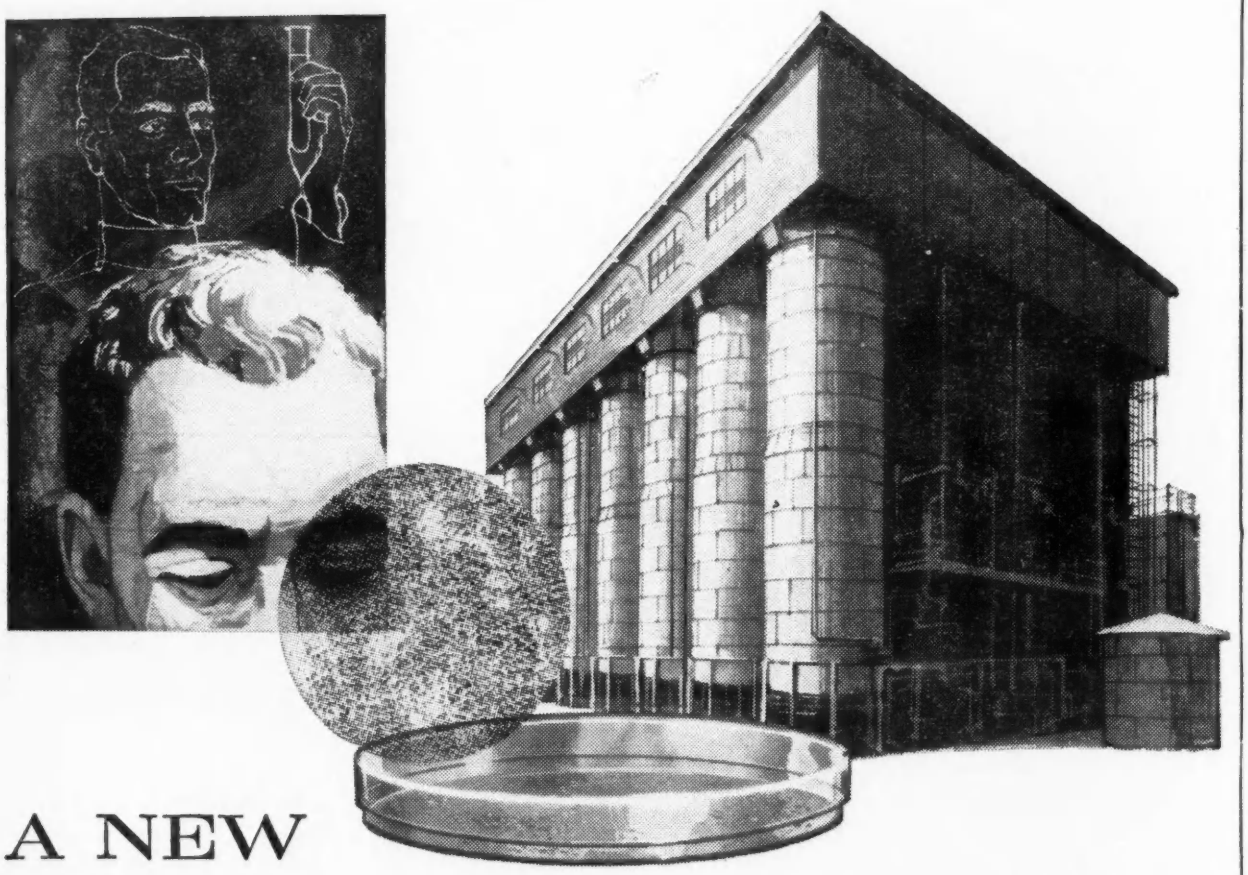
Typical Properties	Isooctyl	Decyl
ASTM Distillation, D1078		
Initial Boiling Point, °C.	185	216
Dry Point, °C.	190	220
Specific Gravity, 20/20 °C.	0.833	0.839
Color, APHA	<10	<10
Alcohol, Wt., %	99+	99+
Aldehyde, Wt., %	0.02	0.02
Flash Point (Open Cup), °F.	185	210

In addition to supplying you with top quality Oxo Alcohols, your Amoco sales representative can provide technical service to help you improve your plasticizers. Your inquiry will receive immediate attention.

AMOCO CHEMICALS CORPORATION
910 South Michigan Avenue, Chicago 80, Illinois

Chamomile Oil—Coaltar

Chamomile oil, blue Hungarian, bots	lb	350.00 - —
Charcoal, activated, NF fib dms., c.l. works	lb	.25 .32
fib dms. 5-ton lots, works	lb	.26½- .32½
fib dms. smaller lots works	lb	.27 - .50
Charcoal, black (see Charcoal, activated)		
Charcoal bone (see Bone black).		
Charcoal hardwood lump bulk c.l., f.o.b plant	ton	55.00 - —
briquets bulk c.l. f.o.b plant	ton	78.00 -80.00
5-lb paper bgs. c.l., same basis	ton	106.00 —
25-lb paper bgs. c.l., f.o.b plant	ton	87.00 - —
40-lb paper bgs c.l., same basis	ton	84.00 —
Chenopodium oil NF cns	lb	4.15 5.00
Chicago acid paste, bbls frt. alld	lb	3.21 - —
Chinawood oil (see Tung oil).		
Chloral hydrate USP jars, 1,000-lb lots	lb	1.00 - —
jars, 500-lb lots	lb	1.03 - —
jars, 100-lb lots or less	lb	1.05 - —
Chlordan, agricultural dms., c.l., frt alld	lb	.65 - —
dms. t.c.l. 5,000 to 10,000-lb. lots, frt alld	lb	.66 - —
Clarified, dms.,, c.l., frt. alld—lb.		.69 - —
dms. t.c.l., 5,000-10,000-lb lots, frt alld	lb	.70 - —
Chlorinated paraffin, 42%, dms., c.l. frt alld	lb	.16¼- —
dms t.c.l. 10 dms or more, same basis	lb	.17¼- —
70%, dms., c.l., same basis	lb	.18½- —
dms t.c.l 10 dms or more, same basis	lb	.19½- —
Chlorinated rubber 5, 10, 20 cps., ctns., c.l., works	lb	.60 - —
ctns., t.c.l., works	lb	.61 - —
125, 1,000 cps., ctns., c.l., works.	lb	.70 - —
ctns. t.c.l., works	lb	.71 - —
Chlorine, liq., cyls., c.l., works, frt equald	lb	.11 - —
cyls., t.c.l. Metropolitan area	lb	.12½- .13¾
tanks, single units, works, frt. equald	100 lbs	3.15 - —
tanks, multiple units, 5 cars, works, frt equald	100 lbs	4.05 - —
tanks, multiple units 4 cars, same basis	100 lbs	4.25 - —
tanks, multiple units, 2 cars, same basis	100 lbs	5.25 5.75
tanks, multiple units, 1 car, same basis	100 lbs	6.25 7.25
Chloroacetic acid, mono, flake, 99%, dms., c.l	lb	.23½- .25½
dms., t.c.l.	lb	.24½- —
tech. flake, 96-97% dms., c.l., frt. equald	lb	.19 - —
dms., t.c.l., frt. equald	lb	.20 - —
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld	lb	1.03 - —
4-Chloro-2-aminotoluene, fused, bbls.	lb	1.38 - —
6-Chloro-2-aminotoluene tech., liq., dms., frt alld	lb	.66 - —
m-Chloroaniline, dms., c.l., frt. alld.	lb	.75 - —
dms., t.c.l., same basis	lb	.77 - —
tanks, same basis	lb	.73 - —
o-Chloroaniline, dms., c.l., frt. alld.	lb	.52 - —
dms., t.c.l., same basis	lb	.54 - —
tanks, same basis	lb	.50 - —
p-Chloroaniline, dms. c.l., frt. alld.	lb	.77 - —
dms., t.c.l., same basis	lb	.79 - —
o-Chlorobenzaldehyde, dms., t.l., works, dlvd to N.Y. Metropolitan area	lb	1.05 - —
dms., t.t.l., same basis	lb	1.20 - —
p-Chlorobenzaldehyde, dms., t.c.l., works, dlvd to N. Y. Metropolitan area	lb	1.95 - —
o-Chlorobenzoic acid, fib dms., t.l., works	lb	1.10 - —
fib. dms., smaller lots, works	lb	1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works.	lb	2.25 - —
fib. dms., less than 2,000-lbs., same basis	lb	2.30 - —
Chloroform, tech., dms., c.l., dlvd. E	lb	.18 - —
dms., t.c.l., same basis	lb	.19 - —
tanks, same basis	lb	.17 - —
Chloroform, USP, dms., c.l., dlvd.	lb	.27 - —
dms., t.c.l., dlvd	lb	.30 - —
tanks, minimum 4,000 gals., dlvd.	lb	.25 - —
2-Chloro-4-nitroaniline, paste, dlvd. E, 100% basis	lb	.81 - —
Powd. dlvd. E, 100% basis	lb	.86½- —
4-Chloro-2-nitroaniline, powd. dlvd. E	lb	.80½- —
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld	lb	.75 - —
4-Chloro-2-nitrotoluene tech., solid, dms., frt alld	lb	.99 - —
6-Chloro-2-nitrotoluene, tech., solid, dms., frt alld	lb	.17 - —
o-Chlorophenol, dms., c.l., frt. equald	lb	.37 - —
dms., t.c.l., same basis	lb	.38 - —
p-Chlorophenol, dms., c.l., frt. equald	lb	.37 - —
dms. t.c.l., same basis	lb	.38 - —
Chloropicrin, comi. cyls., 180 lbs., frt alld	lb	1.07 - —
cyls. 100 lbs. same basis	lb	1.08 - —
cyls., 50 lbs., same basis	lb	1.14 —
Chlorosulfonic acid, dms., c.l., frt. equald	lb	.0465- —
dms., t.c.l. frt. equald	lb	.0515- —
tanks, frt. equald	lb	.0415- —
Chlorosulfonic acid, in stainless steel dms ½c. per lb higher		
o-Chlorotoluene tech. dms., t.l., works	lb	.37 - —
dms., t.c.l., t.t.l., same basis	lb	.38 - —
Choline bitartrate, fib dms. frt. adjusted	kilo.	2.75 3.00
Choline chloride fib dms. frt. adjusted	kilo.	2.75 3.00
Choline dihydrogen citrate, fib. dms., frt adjusted	kilo.	2.75 3.00
Chrome green, CP dark, light medium blue content 1-15%, bbls., dlvd E. of Rockies	lb.	.40 .42
blue content 16-30% bbls., same basis	lb.	.40 .42
blue content 31-45% bbls., same basis	lb.	.41 .43
blue content 45-49% bbls., same basis	lb.	.44 .46
Reduced color, 25%	lb.	.19 .20
Chrome green prices 1c. higher W of Rockies.		
Chrome orange CP bbls., dlvd E. of Rockies	lb.	.31½- —
Chrome orange prices 1c higher W of Rockies.		
Chrome yellow CP bbls., dlvd. E. of Rockies	lb.	.31½- —
Chrome yellow price 1c. higher W. of Rockies		
Chromic acid, 99¾%, dms., c.l., works, frt. equald	lb.	.29½- —
dms. t.c.l. dlvd. N. Y. Metropolitan area	lb.	.30 .31
Chromic acid, NF (see Chromium trioxide)		
Chromium acetate, soln., 7½%, dms. 500-2,000-lb lots, works.	lb.	.10 - —
Chromium oxide, hydrated, bbls., fib dms. c.l. frt alld	lb.	1.20 - —
Pure, bgs., c.l., frt alld	lb.	44½- —
bgs. t.c.l. same basis	lb.	45¼- —
Chromium trioxide NF bots	lb.	1.15 —
Cinchona bark NF red broken, bgs	lb.	.25 - —
NF yellow broken bgs.	lb.	.35 .40
Chromium fluoride bbls., works	lb.	.51 .52
Cinnamic acid refd bots	lb	2.50 3.50
Cinnamic alcohol, bots.	lb.	1.75 - 2.20
Cinnamic aldehyde, dms	lb.	.92 1.25
Cinnamon, Ceylon, No. 2, bgs	lb.	.69 - —
Ceylon, No. "0000," bgs	lb.	.78 - —
Cinnamon bark oil bots	lb.	36.00 -70.00
Cinnamon leaf oil, crude, dms	lb	1.35 2.00
USP (Cassia), cns., dms	lb	8.50 -13.50
Citral, CP bots	lb.	3.00 3.25
Extra, bots.	lb.	3.45 5.05
Citric acid USP anhyd., fine gran., bgs., dms., c.l	lb.	.29½- .30
bgs., dms. 10,000-lb lots, 1 shipt	lb.	.30 .30¼
bgs., dms., smaller lots	lb.	.30½- .31
USP, hydrous, fine gran., bgs., dms., c.l	lb.	.27½- .28
bgs., dms., 10,000-lb. lots, 1 shipt	lb.	.28 - .28½
bgs., dms., smaller lots	lb.	.29 - .29½
Powdered citric acid ½c. per lb. higher.		
Citronella oil Ceylon, dms.	lb.	.75 1.05
Java-type, dms.	lb.	.80 - 1.20
Citronellal, bots., dms	lb	1.60 - 2.10
Citronellol, bots., dms	lb.	2.30 - 3.70
Civet, artif. bots.	lb.	13.75 -15.00
Nat. bots.	oz.	8.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn	ton.	17.50 -21.50
crushed, shed moisture, bulk, c.l. Tenn	ton	8.00 -11.00
Clay, ball, imp., airfloated bgs, c.l., Atl. port	net-ton.	42.00 -45.75
lump, bulk, Atl port	net-ton.	29.50 -35.75
Clay, China, dom., dry-grd. air-floated, 99% 325 mesh, Georgia, bgs., c.l., works.	ton.	10.00 -12.00
Georgia, bgs. t.c.l. works.	ton.	15.50 - —
Clay, China, dom., airfloated, 99%, 300 mesh bgs., c.l., Georgia, works	ton.	13.50 -14.50
bgs. t.c.l., ex-whse	ton.	35.00 -36.00
Clay, China, imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me	long-ton.	20.00 -35.00
white, powd., bgs., c.l., ex dock.	net-ton.	50.00 —
bgs., t.c.l. ex whse	net-ton.	60.00 -70.00
Cleaner's naphtha, petroleum 140°F, flash, tanks, east coast, New Jersey and New York	gal.	18 —
tanks, group 3	gal.	.13875- —
tanks, Houston, Tex.	gal.	.19 —
tankwagon, Newark	gal.	.19 - —
New York	gal.	.19 - —
Philadelphia	gal.	.19½- —
Cleve's acid, tech., mixed, solid, dms., frt. alld	lb.	1.05 - —
Cleve's acid, 1,8, tech. solid, dms., frt. alld	lb.	.77 - —
1,7, tech., dms., frt. alld.	lb.	2.20 - —
Cloves, Madagascar, bgs	lb.	.40½- —
Zanzibar, bgs.	lb.	.42½- —
Clove bud oil, USP, dms	lb.	2.70 3.60
Clove leaf oil, crude, dms	lb.	1.30 - 1.80
CMC, crude, 96.4% low or medium vis. bgs. or fib. dms., 23,000 lbs., dlvd. E., 100% basis	lb.	.41½- —
96.4% low, or medium vis., bgs. or fib. dms., 23.000 lbs. dlvd. E., 100% basis	lb.	.43½- —
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis	lb.	.41½- —
bgs. or fib. dms., t.c.l., dlvd. E., 100% basis	lb.	.43½- —
CMC, purif. high vis. (see Cellulose gum).		
CMC, standard, low or medium vis., bgs., 23,000 lbs., works, frt. alld	lb.	.57 - —
bgs., smaller lots, same basis.	lb.	.59 - —
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.		
Coaltar, crude, resale for solns., tanks, works	gal.	.17 - —



A NEW basic source for CITRIC ACID, U.S.P.

Here is an unusually pure citric acid produced in the Midwest by Miles Chemical Company's unique deep fermentation process. Ready for immediate shipment in truck-load quantities.

For years Miles has produced a considerable volume of citric acid mainly for its own use in pharmaceuticals. A unique deep fermentation process, pioneered by Miles, yields a product remarkably free from contamination and meets Miles' most strict purity and mesh specifications.

This deep fermentation capacity has been expanded to provide a reliable, large volume supply of citric acid, U.S.P. for the open market. It's ready for shipment when and where you need it. Our plant is centrally located . . . a convenient producing point with excellent transportation routes in all directions.

Write for full details. A Miles Chemical representative will be happy to discuss your requirements at your request.

Miles Chemical Company

division of Miles Laboratories, Inc.
Elkhart, Indiana

Coaltar, refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., l.c.l., ex whse. gal. .39 - —
tanks, works gal. 20½- —
Coaltar pitch, aluminum, bulk, works ton 44.00 - —
Carbon and indust, bulk, works ton 44.00 - —
Core, bulk, works ton 40.50 - —
Fiber, bulk, works ton 48.00 - —
Roofing, 140-155°F., Federal Specification RP-381 Type 1, tanks works ton 41.00 - —
Cobalt acetate, 23.7% Co., dms., dlvd lb 1.04 - —
Cobalt blue genuine 250 lb bbls., dlvd E. of Rockies lb 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies
Cobalt blue imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .99 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb 2.05 - —
Cobalt linoleate, fused 8½% Co., dms lb. .71½- —
Liq., 6% Co. dms. lb. 57½- —
Cobalt metal, 97-99%, dms., f.o.b. carrier lb. 1.75 - —
Cobalt naphthenate liq. 6% Co., dms. dlvd lb. .48¾- —
Cobalt nitrate, 20.1% Co. bbls., dlvd. lb. .80 - —
Cobalt oxide black, ceramic grade, 72½-73½% Co., kgs., dlvd. E. of Mississippi R lb. 1.33 - —
70-71% Co. kgs same basis lb 1.29 - —
Cobalt oxide prices W of Mississippi R. 3c. per pound higher
Cobalt phosphate, powd., 32.1% Co., dms., dlvd lb 1.35 - —
Cobalt resinate, fused, 3% Co., dms. lb. .29½- —
Cobalt sulfate, cryst., 21% Co., dms. dlvd lb. .64 - —
Cobalt sulfate, monohydrated, 33% Co., dms., dlvd lb. 1.09 - —
Cobalt tallate, 6% Co., dms., dlvd, lb. .44 - —
Cocaine, USP, cns., 100-oz. lots oz. 17.80 - —
Cocaine hydrochloride, cns., 100-oz. lots oz. 13.75 - —
Cocillana bark, bls. lb. .20 - .22
Cocoa butter, bgs. lb. .66 - .71
Coconut oil, crude, tanks, New York, lb. .20 - —
tanks, Pac. coast lb. .19 - —
refd., deodorized, dms. lb. .26 - .27
Coconut oil acids, dist., dms. lb. .30½- .33
tanks lb. .28 - —
double dist. (stripped), dms. lb. .31½- .34
tanks lb. .29 - —
Cod oil, dms., spot lb. .08¼- .08¾
Codeine, NF, cns., 100-oz lots oz. 13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz. 11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz. 10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz. 10.75 - —
Codliver oil, USP, dms. gal. 1.40 - 1.70
Cohosh root, black, bls. lb. .20 - .22
Blue bls. lb. .20 - .22
Colchicine, USP, bots. oz. 27.00 - —
Colchicum root, bls. lb. .30 - .35
Colchicum seed, bgs. lb. .60 - .65
Collodion, USP, dms. lb. .32½- —
Flexible, dms lb. .34 - —
Colocynth pulp, bls. lb. .75 - —
Colombo root, bls lb. .16 - .18
Condurango bark, bls. lb. .26 - —
Congo copal gum, No. 1, bgs. lb. .25 - .26
No. 2 bgs. lb. .22 - .24
No. 3, bgs. lb. .16½- .19
Copaiba balsam, cns., dms. lb. .65 - —
Copaiba oil, cns. lb. 1.35 - 2.00
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l., works lb. .54 - —
Copper carbonate, 55%, bgs., c.l., works lb. .3490- —
bgs., l.c.l., works lb. .3640- —
Copper chloride, cupric, anhyd., dms., works lb. .44¾- .45¼
Cryst., dihydrate dms. works, lb. .30½- .31
Cryst., dried, dms., works lb. .38¾- .39¼
Copper chloride cuprous, dms., works lb. .39¼- .42½
Copper cyanide, tech., dms., 20,000-lb lots or more lb. .609 - —
dms., 1,000-lb. lots or more lb. .619 - —
dms., smaller lots lb. .639 - .65
Copper gluconate, dms. lb. 3.20 - —
Copper hydrate dms., c.l., frt. alld, E. of Miss lb. .51¾- —
dms., l.c.l., same basis lb. .52¼- —
Copper metal, electrolytic, dlvd. Valley basis lb. .31½- —
Copper naphthenate, liq., 8% Cu, dms., frt. alld lb. .26½- —
Copper nitrate, tech., cryst., dms., works lb. .30¾- .32¾
Copper oleate, solid, 9% Cu, dms., works lb. .45 - —
Copper oxide, black, bbls., 100-5,000-lb. lots, works lb. .47¾- —
Copper oxide, red, 97%, USN Type 1, bbls., 100-5,000-lb. lots, lb. .49 - —
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works, lb. .47 - —
Copper quinolinolate, 18% Cu, dms., ton lots lb. 4.25 - —
10% active quinolinolate, dms lb. 1.14 1.15
Copper resinate, precip, dms., frt. alld lb. .36½- —
Copper sulfate, CP, gran., dms., works lb. .1885- —
Cryst., 99%, bgs., c.l., works. 100 lbs. 12.35 - —
bgs., l.c.l., works 100 lbs. 12.85 -15.35
Copper sulfate, monohydrated, 35%, dms., c.l., works 100 lbs. 23.10 - —
dms., l.c.l., works 100 lbs. 23.85 - —
Copper sulfate, tribasic distributors, bgs., c.l., works 100 lbs. 28.20 - —
bgs., l.c.l., works 100 lbs. 29.70 - —
Copper undecylenate dms. lb 2.75 - —
Copra, Atl., Gulf ports ton. 247.50 - —
Pac. ports, c.i.f. lb. 242.50 - —
Coriander oil, USP bots lb. 9.25 -11.50
Coriander seed, Moroccan, bgs. lb. .08 - —
Rumanian, bgs. lb. .07½- —
Yugoslavian bgs lb. .08½- —
Corn oil, crude, tanks, works lb. .11¼- —
Foots (soapstock) acid 95%, tanks, New York lb. .05¼- —
Refd., salad, dms lb. .1698- .1725
tanks lb. .1498- —
Corn oil, acids, dist., dms. lb. .16¾- .19¼
tanks lb. .14¼- —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.30 - —
paper bgs., l.c.l 100 lbs. 7.45 - —
Corn syrup, 42° Be., non-ret. dms., c.l 100 lbs. 7.31 - —
non-ret. dms., l.c.l. 100 lbs. 7.46 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP kilo or more gram. 1.15 - 1.20
Costus oil, bots. oz 6.00 - —
Cottonseed meal, 41%, bgs., Memphis ton. 64.00 - —

Cottonseed oil, crude, tanks, South, East lb. .09⅝- .09¾
tanks, Valley lb. .09⅝- —
tanks, Texas, Lubbock lb. .09⅛- —
tanks, Texas, Waco lb. .09⅜- —
Foots (soapstock) acid 95%, tanks, New York lb. .05 - —
Refd., salad, dms. lb. .14⅝- .14¾
tanks lb. .12⅝- —
Cottonseed oil acids, dist. dms lb 16¾ 19¼
tanks lb 14¼ —
Coumarin NF cryst dms lb 3.60 3.70
Cramp bark, NF, bls. lb. .90 - 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate NF bots chys. lb 3.05 3.26
Creosote, coaltar, crude tanks, works, frt adjusted gal .24 - —
Crude, soln 80%, tanks, works, gal 226 - —
Refd., dms., c.l., works gal. .50 - —
dms., l.c.l., same basis gal 62 - —
tanks, same basis gal .38 - —
West Coast creosote prices computed on a basis of 24c per gallon for straight oil and 20c per gallon for coaltar
Creosote oil (see Creosote coaltar).
Creosote, beechwood, chys., dms., f.o.b. works dlvd in Metropolitan area lb 1.72 1.77
Hardwood, NF, chys, dms same basis lb 1.42 1.47
Pinewood, dms, incl. c.l. works lb .0561- —
dms incl., l.c.l. works lb .0634- —
dms incl., l.c.l. ex whse, New York lb .0745- —
tanks, works lb. .0460- —
Cresol, tech., 30% below 204°C., dry above 207°C. wide distillation range, non-ret. dms., c.l. frt. alld lb. .16½- —

Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., l.c.l., same basis lb. .17½- —
tanks same basis lb. 145 —
USP non-ret dms. c.l., same basis lb .18 - —
non-ret dms., l.c.l., same basis lb .19 - —
tanks, same basis lb .16 - —
m-Cresol 95-98% dms. c.l., works. lb .60 - —
dms., l.c.l. works lb. 61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb .18 - —
dms., l.c.l. same basis lb .19 - —
tanks, same basis lb 16 - —
2,97% 2°C., dms., c.l., frt. equald. lb. .22 - —
dms. l.c.l., same basis lb .23 - —
tanks, same basis lb .20 - —
o-Cresol 30.5°C m.p and over, ret. dms. c.l., frt equald lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb .15 - —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
29°-29.9°C. m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., l.c.l., same basis lb .17 - —
tanks, same basis lb .14 - —
25°-28°C. m.p., dms., c.l., frt. equald lb. .15 - —
ret. dms., l.c.l., same basis lb .16 - —
tanks, same basis lb. .13 - —

p-Cresol, 98%, dms., c.l., dlvd lb .52 - —
dms., l.c.l., dlvd lb .53 - —
tanks dlvd lb .49 - —
2,3-Cresotic acid, dms., ton lots, works lb 70 —
dms., smaller lots, works lb 72 —
p-Cresyl methyl ether cns lb 1.80 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades dms., c.l., t.l., frt equald gal 1.35 —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same bassi gal. 1.15 - —
Cresylic acid, coaltar, dom meta para content 25% or less, dms. c.l t.l. same basis gal 1.20 —
dms., l.c.l., same basis gal. 1.25 - —
tanks, frt. equald gal. 1.00 - —
Cresylic acid, coaltar, imp. meta-para content 25% or less, f.o.b works, frt equald, to competitive points 50 dms or more gal 1.03½- —
less than 50 dms., same basis gal. 1.05 1.15
tanks, same basis gal. 1.00 —
Crotonaldehyde, 91-93% dms., l.c.l., works lb. .25 —
Crotonic acid, dms. 200 lbs. or more, l.c.l., works lb. .51 —
Cryolite, nat., indust. bgs., c.l., works 100 lbs. 13.00 —
bgs., l.c.l., works 100 lbs. 14.25 —

HOW *HERCULES* HELPS...

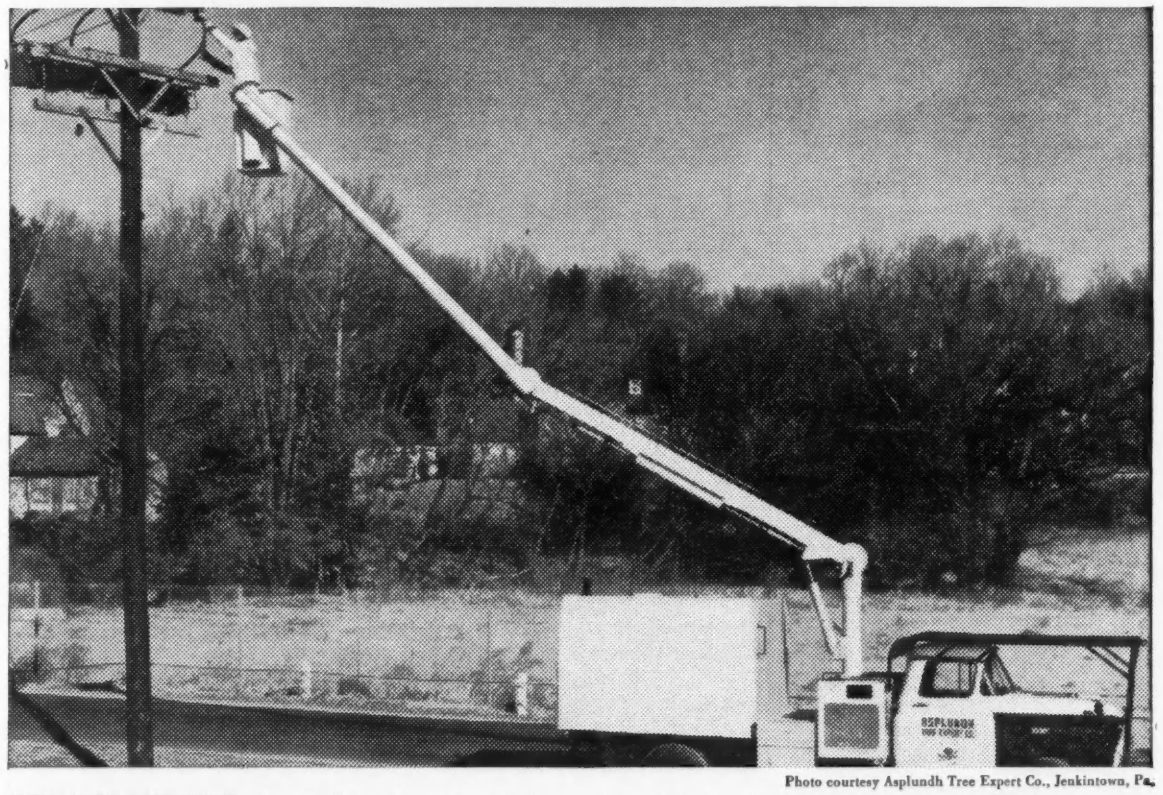
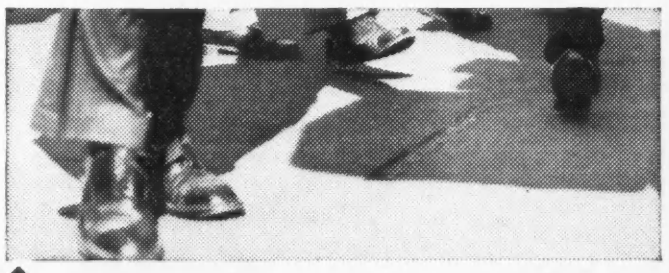
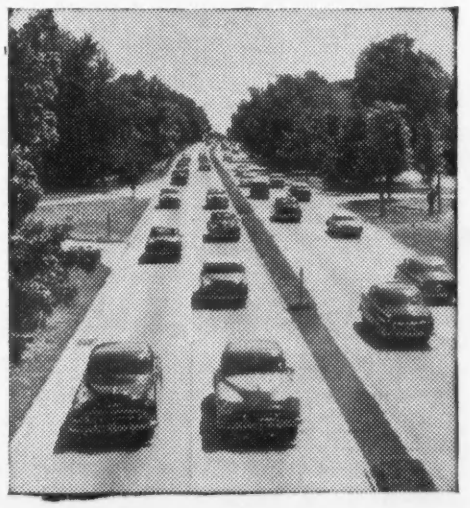


Photo courtesy Asplundh Tree Expert Co., Jenkintown, Pa.

MEN OVER THE WIRE—Spiralloy®, the filamentwound glass fiber-reinforced plastic material made by Hercules, is being used for booms on truck-mounted cranes of utility companies and tree surgeons. Since it is a nonconductor of electricity, Spiralloy is particularly well-suited for this application. Lighter than aluminum and stronger than steel, it has unmatched high-strength-to-weight ratio. Spiralloy-wound cylindrical structures also are gaining acceptance in such fields as missiles, boats, pipe, and storage tanks.



INCREASE SHOE LIFE—A new Hercules material now goes into specially impregnated leather shoe soles that actually "breathe" and have many times the wearability of leather soles. Developed in cooperation with the U. S. government, this product has already proven itself in many types of footwear.



MAKE DRIVING ECONOMY—Among the many Hercules items that go into your automobile is Dalpac® 4, Hercules di-tert-butyl-p-cresol. This antioxidant is added to gasoline at the refinery to inhibit gum formation, stabilize color and help maintain engine cleanliness. It means more trouble-free miles of driving for you.

HERCULES

HERCULES POWDER COMPANY
INCORPORATED
900 Market Street, Wilmington 99, Delaware

CHEMICAL MATERIALS FOR INDUSTRY

059-7

Cube root powd., 5% rotenone, bgs., c.l., t.l. works lb .25 - —
Cubeb berries NF, bgs lb 1.00 - —
Powd. cs lb 1.15 - —
Cubeb oil cns lb 12.00 -16.00
Cumene dms c.l., works lb 12 - —
dms. t.c.l. works lb 14 - —
tanks works lb 11 - —
Cumin seed Iranian, bgs lb 30 - —
Moroccan bgs lb 31 - —
Turkish, bgs. lb 27 - —
Cumin seed oil bots cns lb 15.50 -17.00
Cyanamide fertilizer mixing grade, 21% N gran bgs. Niagara Falls Ont., contract ton 57.00 - —
pulv 21% N bgs works unit-ton 2.85 - —
Cyanamide indust grade bgs. c.l. works ton 75.00 - —
bgs. t.c.l. works ton 96.00 - —
Indust grade 6-16 mesh, dms. c.l. works ton 120.00 - —
dms. t.c.l. works ton 140.00 - —
Cyclohexane, 99% tech dms. c.l., dlvd E of Rockies gal 1.02 - —
dms. t.c.l. same basis gal 1.10 - —
dms. c.l. dlvd W of Rockies gal .77 - —
dms., t.c.l. same basis gal .85 - —
tanks, works gal .55 - —
98% tech., dms., c.l., f.o.b. works, lb .62¼ - —
dms., t.c.l., same basis lb .66½ - —
tanks, same basis lb .40 - —
Cyclohexanol tech dms. c.l., works, frt alld E lb .28½ - —
dms. t.c.l. works, same basis, lb .29½ - —
tanks, works same basis lb .26 - —
Cyclohexanone tech. dms. c.l., works lb .33½ - —
dms., t.c.l., works lb .34½ - —
tanks, works lb .31 - —
Cyclohexylamine dms., c.l., works lb .49 - —
dms. t.c.l. works lb .50 - —
tanks, works lb .47 - —
Cyclopropane CP 2-lb. cyls., works cyl 1.48 00 - —
6-oz cyls. works cyl 1.12 00 - —
USP, hospitals, cyls., 40-gal. lots, gal .42 - —
cyls. 100-gal lots gal .41 - —
cyls., 200-gal lots gal .40 - —
Cypress oil, bots. lb 5.30 - —

D

2,4-D tech. bgs. dms. c.l., works, frt equald lb .40 — —
bgs. dms., t.c.l. same basis lb .45 .49
2,4-D butyl ester dms. c.l. works, lb .43 - —
dms. t.c.l. same basis lb .48 .52
tanks, same basis lb .42 —
2,4-D isopropyl ester, dms., c.l., works lb .43 - —
dms. t.c.l. works lb .48 .52
tanks works lb .42 —
Dammar gum Batavia A E, cs lb No stocks
East India Batu bold bgs. lb 14¼ 16½
nubs and chips, bgs lb .08½ .09½
black bold bgs lb 14½ 16½
nubs and chips bgs lb 12¼ .13½
unscraped bgs lb 13 .14½
pale chips bgs lb 14½ 16
nubs and chips, bgs. lb .09 .10
Siam cs lb .30 .33
Singapore No 1 bgs lb .36 41
No 2 bgs lb .29 32
No 3, bgs lb No stocks,
dust bgs lb 17 19
Dandelion root bls lb .28 .32
DDD tech, flake grd, fib. dms., c.l. works lb .45 47
fib dms. t.c.l., works lb .46 .48
DDT flake or lump bgs. c.l., dlvd lb. .23 —
bgs. smaller lots same basis, lb .25 - —
fib dms. c.l. same basis lb .24 - —
fib dms., smaller lots, same basis lb. .26 - —
Powdered DDT le. per pound higher
1-Decanol tech. dms. c.l. dlvd E, lb. .43½ - —
dms. t.c.l., dlvd. E lb. .45½ - —
tanks, dlvd E lb. .41 - —
Decyl alcohol mixed isomers, dms., c.l. dlvd lb 23½ - —
dms t.c.l. dlvd lb 25 - —
tanks, dlvd lb 21 - —
Perfume grade bots lb 1.75 2.00
Decyl alcohol normal (see 1-Decanol)
Deertongue leaves, bls. lb .55 - .60
Defluorinated phosphate feed grade 13% P paper bgs., c.l. t.l. works ton 51.00 - —
18% P. paper bgs. c.l. works ton 63.50 -69.12
19% P. paper bgs. works, Houston, Tex., c.l. t.l ton 71.50 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l prices
Degras common, bbls lb .10 .12
Neutral bbls lb .21 .23
Denatured alcohol, ethyl CD-12 CD-13, CD-14 CD 17 dms. c.l., dlvd E of Rockies gal .69½ —
dms. t.c.l. same basis gal .74½ .80½
tanks, dlvd. same basis gal .53½ —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division
Denatured alcohol ethyl, proprietary solvent, dms., c.l. dlvd, E of Rockies gal .72 —
dms., t.c.l., same basis gal .77 .83
tanks, same basis gal .56 —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1 dms., dlvd E of Rockies gal .70½ —
dms. t.c.l same basis gal .75½ .81½
tanks, same basis gal .54½ —
SD2B dms., c.l. dlvd E of Rockies gal .69 —
dms., t.c.l., same basis gal .74 .80
tanks, same basis gal .53 —
SD3A dms., c.l., dlvd E of Rockies gal .68 —
dms., t.c.l., same basis gal .73 .79
tanks, same basis gal .52 —
SD23A, dms., t.c.l. dlvd E of Rockies gal .70½ —
dms., t.c.l., same basis gal .75½ .81½
tanks, same basis gal .54½ —
SD23H, dms., c.l., dlvd. E. of Rockies gal .71 —
dms., t.c.l., same basis gal .76 .82
tanks, same basis gal .55 —
SD29, dms, c.l., dlvd. E. of Rockies gal .69½ —
dms., t.c.l., same basis gal .74½ .80½
tanks, same basis gal .53½ —
SD30, dms., c.l., dlvd. E. of Rockies gal .68 —
dms. t.c.l. same basis gal 73 .79
tanks same basis gal .52 —
SD-35A, dms., c.l., dlvd. E. of Rockies gal .71 —
dms., t.c.l., same basis gal .76 .82
tanks, same basis gal .55 —

Denatured alcohol, ethyl, SD-40, dms., c.l., dlvd, E. of Rockies gal .70½ - —
dms., t.c.l., same basis gal 75½ .81½
tanks, same basis gal 54½ —
For anhyd alcohol on above formulas prices are 7c per gal higher
West coast dlvd prices are the same as eastern prices except in Idaho, Montana Oregon and Washington where a 5c differential on tankcars is maintained
d-Desoxyephedrine hydrochloride, dms lb. 15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms lb 6.50 - —
Dextrin corn gum paper bgs., c.l., 100 lbs 9.38 - —
paper bgs., t.c.l 100 lbs 9.53 - —
canary dark, paper bgs., c.l. 100 lbs 9.22 - —
paper bgs. t.c.l 100 lbs 9.37 - —
Indust grade 6-16 mesh, dms., canary light paper bgs. c.l., 100 lbs 9.12 - —
paper bgs., t.c.l 100 lbs 9.27 - —
white, paper bgs., c.l 100 lbs 8.96 - —
paper bgs t.c.l 100 lbs 9.11 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs higher
Dextrose, anhyd., coml., bgs., c.l., 100 lbs. 8.80 - —
bgs., t.c.l. 100 lbs. 8.95 - —
Anhyd., special, aluminum foil lined fib. dms., 200-lb dms 100 lbs. 14.70 - —
100-lb. dms. 100 lbs. 15.20 - —
Hydrated, coml., bgs., c.l., ex whse 100 lbs. 7.80 - —
bgs., t.c.l., ex whse 100 lbs. 7.95 - —
USP, dms. lb. .19¾ - —
Diacetyl flavor grade bots lb. 4.30 4.55
Di-sec-amyl phenol dms., c.l., works lb. .32 - —
dms. t.c.l., works lb. .33 - —
tanks works lb. .29½ - —
Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms., t.c.l., works lb. .33 - —
tanks, works lb. .29½ - —
Diacetone alcohol, acetone-free, dms. c.l., dlvd lb. .15½ - —
dms. t.c.l. dlvd lb. .17 - —
tanks, dlvd lb. .13 - —
Diacetone alcohol tech. dms., c.l., dlvd lb. .15 - —
dms. t.c.l. dlvd lb. .16½ - —
tanks, dlvd lb. .12½ - —
Diallylamine dms., c.l., dlvd .. lb .98½ - —
dms. t.c.l. dlvd lb 1.00 - —
tanks, dlvd lb .96 - —
o-Dianisidine dry, tech. fib. dms. lb 2.00 - —
Dibenzyl sebacate dms. c.l., works. lb .93 - —
dms. t.c.l same basis lb .94 - —
tanks, same basis lb .91 - —
p-Dibromobenzene bgs. 500-lb lots. lb .55 - —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms, dlvd lb. .65 - —
t.t.l., dms. same basis lb .68 - —
Food grade, c.l., t.l. dms., dlvd. lb .65 - —
t.t.l., dms., same basis lb .68 1.10
2,6-Di-tert-butyl-p-cresol, tech., dms, c.l., t.l., dlvd lb. .57 -
dms, t.c.l., same basis lb. .60 -
tanks, same basis lb. .54 -
Dibutyl fumarate dms., c.l., t.l., dlvd. E lb. .31½ - —
dms., t.c.l., t.t.l., dlvd. E lb. .33 - —
tanks, dlvd. E lb. .29 - —
Dibutyl maleate dms. c.l., t.l., dlvd E lb. .31½ - —
dms., t.c.l., t.t.l., dlvd. E lb. .33 - —
tanks, dlvd. E lb. .29 - —
Dibutyl phthalate dms. c.l. dvd E. lb. .28½ - —
dms. t.c.l. same basis lb. .30 - —
tankcars tanktrucks, 2,000 gals., same basis lb. .26 - —
tanktrucks, 1,000-1,999 gals. same basis lb. .26½ - —
Dibutyl sebacate dms., c.l., works. lb. .67½ - —
dms. t.c.l., works lb. .68½ - —
tanks, works lb. .65½ - —
Dibutyl tartrate dms. works, frt, alld lb. .65½ - —
Dibutylamine dms. c.l., dlvd lb. .55½ - —
dms., t.c.l., same basis lb. .57 - —
tanks, same basis lb. .53 - —
Dicapryl phthalate dms. c.l., dlvd. lb. .28 - —
dms., t.c.l. dlvd lb. .29½ - —
tanks, dlvd lb. .24½ - —
Dicapryl sebacate dms. c.l., works. lb. .63 - —
dms. t.c.l., works lb. .63½ - .64
tanks, works lb. .61 - —
2,5-Dichloroaniline dms. works lb. .83 - —
3,4-Dichloroaniline, tech. solid, tanks, frt alld lb. .73 - —
o-Dichlorobenzene dms. c.l., frt. alld. E lb. .12¾ - —
dms. t.c.l. same basis lb. .13¾ - —
tanks, same basis lb. .11 - —
p-Dichlorobenzene, dms. c.l. f.o.b., works, frt alld E lb. .12 - —
dms. 2,000 lbs or more same basis. lb. .14½ - —
1,4-Dichlorobutane dms. c.l. or t.l., works lb. .33½ - —
dms. t.c.l., or t.t.l. works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether dms., c.l. t.l., dlvd E lb. .15½ - —
dms. t.c.l., t.t.l., same basis lb. .17 - —
tanks, same basis lb. .13 - —
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
dms. t.c.l., works lb .06 - —
tanks works lb .03 - —
Dichlorophenoxyacetic acid (see 2,4-D)
Dicyclohexylamine dms. c.l. works. lb. .54 - —
dms., t.c.l. works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, gran., fib. dms., c.l., works, frt. alld. lb. .46½ - —
fib. dms. t.c.l., same basis lb. .48 - —
Didecyl phthalate dms. c.l. works. lb. .28½ - —
dms., t.c.l., same basis lb. .30 - —
tankcars, tanktrucks 2,000 gals., same basis lb. .26 - —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½ - —
Dieldrin, dms., c.l., dlvd lb. 1.85 - —
dms., t.c.l., dlvd lb 1.90 - —
Diethanolamine dms. c.l., dlvd E lb. .27 - —
dms., t.c.l., same basis lb. .28½ - —
tanks, same basis lb. .24½ - —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½ - —
dms., t.t.l., frt. alld lb. .28½ - —
tanks, frt. alld lb. .26½ - —
Diethyl barbituric acid (see Barbital)
Diethylbenzene dms. t.l. frt. alld. lb. .16½ - —
dms., t.t.l., same basis lb. .18½ - —

Diethyl carbonate, dms. c.l., f.o.b. works lb. .47½ - —
dms., t.c.l., same basis lb. .48½ - —
tanks, same basis lb .45 - —
Diethyl ethanolamines, dms. c.l., dlvd lb. .69½ - —
dms., t.c.l., dlvd. lb. .71 - —
tanks, dlvd lb. .67 - —
Diethyl oxalate dms. c.l. f.o.b. works lb. .42½ - —
dms., t.c.l. same basis lb. .43½ - —
tanks, same basis lb .40 - —
Diethyl phthalate dms. c.l. dlvd. lb. .27½ - —
dms., t.c.l. dlvd lb. .29 - —
Diethyl phthalate tanktrucks, 1,000-1,999 gals. same basis lb. 26½ - —
tankcars tanktrucks 2,000 lb lots, same basis lb. .26 - —
Diethyl sulfate dms. c.l. works lb. .19½ - —
dms., t.c.l. works lb. .20¼ - —
tanks, works lb .17½ - —
Diethyl toluamide 90-95% meta isomer dms., c.l. t.l. works lb 2.30 - —
5-44 dm lots works lb 2.35 - —
1-4 dm lots works lb 2.40 - —
Diethylamine dms. c.l. dlvd. E lb. .52 - —
dms., t.c.l same basis lb. .53½ - —
tanks, same basis lb. .49½ - —
N,N-Diethylaniline dms. c.l., frt. alld lb. .57 - —
dms. t.c.l. same basis lb. .58 - —
tanks, same basis lb. .55 - —
N,N-Diethyl-m-toluidine tech., liq., tanks, frt alld lb. .83 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate)
Di-2-ethylhexyl phthalate (see Dioctyl phthalate)
Diethylene glycol dms. c.l. dlvd, E lb. .17¾ - —
dms., t.c.l., same basis lb. .19¼ - —
tanks, same basis lb. .15¼ - —
Diethylene glycol diethyl ether, dms. c.l. works lb. .51½ - —
dms. t.c.l., works lb. .52¼ - —
Diethylene glycol monobutyl ether, c.l. dms. works lb. .30¾ - —
dms., t.c.l., works lb. .32¼ - —
tanks, dlvd E lb. .28¼ - —
Diethylene glycol monobutyl ether acetate dms., c.l. works lb. .30¾ - —
dms. t.c.l., works lb. .31½ - —
tanks, dlvd E lb. .28¾ - —
Diethylene glycol monoethyl ether, dms. c.l., dlvd lb. .22½ - —
dms., t.c.l., dlvd lb. .24 - —
tanks, dlvd E lb. .20 - —
Diethylene glycol monoethyl ether acetate dms., c.l. works lb. .27¼ - —
dms. t.c.l. works lb. .28 - —
tanks, works lb. .25¼ - —
Diethylene glycol monomethyl ether, dms. c.l. dlvd lb. .21 - —
dms., t.c.l., dlvd lb. .22½ - —
tanks, dlvd E lb. .18½ - —
Diethylenetriamine dms. c.l., dlvd. E lb. .44 - —
dms. t.c.l. dlvd E lb. .45½ - —
tanks, dlvd E lb. .41½ - —
Diethylstilbestrol USP bots 10-kilo lots kilo. 100.00 -147 50
bots. 1-kilo lot kilo 110.00 -152.50
Digitalis leaves, USP, dom., dms lb. 1.25 - —
Digitoxin USP bots gram 4.75 - —
Diglycol laurate dms lb. .32¾ .34
Diglycol stearate dms. ton lots lb. .26 .28
Diglycolic acid bgs. c.l. t.l. works. lb. .15½ - —
bgs. t.c.l., works lb. .16 - —
Dihexyl sebacate dms., c.l., works. lb. .66 - —
dms., t.c.l. works lb. .67 - —
tanks, works lb. .64 - —
Dihydrazine sulfate, dms. works lb 1.10 1.25
Dihydrostreptomycin hydrochloride, bulk, gram .04 - .041
Dihydrostreptomycin sulfate bulk, gram .04 - .041
1,2-Dihydroxy anthraquinone, dms., works lb. 3.45 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane pure dms lb. 2.55 - —
tech., dms., 20,000 lbs. or more lb. 1.11 - —
dms., 1,050 lbs. to 20,000 lbs. lb. 1.13 - —
dms., 150 lbs. to 1,050 lbs. lb. 1.15 - —
Di-isobutyl ketone dms. c.l. dlvd. lb. .17 - —
dms. t.c.l. dlvd lb. .18½ - —
tanks, dlvd. lb. .14½ - —
Di-isobutyl phthalate, dms., c.l., dlvd E lb. .31½ - —
dms., t.c.l. same basis lb. .32½ - —
tanks same basis lb. .29 - —
Di-isobutylene dms. c.l. dlvd. E lb. .10 - —
dms. t.c.l., dlvd. E lb. .11½ - —
tanks, dlvd E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .27½ - —
dms., t.c.l. same basis lb. .29 - —
tanktrucks, 1,000-1,999 gals lb. .25½ - —
tankcars, tanktrucks, 2,000 gals., lb. .25 - —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 - —
dms., t.c.l., works lb. .62½ - .63
tanks, works lb. .60 - —
Di-isopropanolamine dms. c.l., dlvd. lb. .23¼ - —
dms., t.c.l. same basis lb. .24¾ - —
tanks, same basis lb. .20¾ - —
Di-isopropylamine dms., c.l., dlvd. E of Rockies lb. .50½ - —
dms., t.c.l., same basis lb. .52 - —
tanks, same basis lb. .48 - —
Dillweed oil, dom., bots, dms lb. 3.25 - 4.25
Dimethyl anthranilate cns lb. 4.35 - —
Dimethyl ethanolamines, anhyd., dms. c.l., dlvd lb. 1.225 - —
dms., t.c.l., dlvd. lb. 1.235 - —
tanks, dlvd. lb. 1.20 - —
70% dms. c.l., dlvd., 100% basis, contained amines lb. .68½ - —
dms., t.c.l., dlvd., 100% basis lb. .69½ - —
tanks, dlvd 100% basis lb. .66 - —
Dimethyl hydroquinone, dms. lb. 1.90 2.20
Dimethyl phthalate dms., c.l., works lb. .27½ - —
dms., t.c.l., works lb. .29 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .25½ - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 - —
Dimethyl sebacate dms., c.l., works. lb. 1.31 - —
dms., t.c.l., works lb. 1.30 - —
tanks, works lb. 1.28 - —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½ - —
ret. dms., t.c.l., works lb. .18½ - —
tanks, works lb. .16½ - —
Dimethyl sulfide, dms., c.l., works, lb. .16½ - —
dms., t.c.l. works lb. .17 - —
tanks, works lb. .15 - —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 - —
dms. t.c.l., frt. equald, 100% basis lb. .38½ - —
tanks, frt. equald, 100% basis lb. .28 - —
40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., t.c.l., frt. equald, 100% basis lb. .35½ - —
tanks, frt. equald 100% basis, lb. .28 - —
N,N-Dimethylaniline dms., c.l., frt. alld lb. .30 - —
dms., t.c.l. frt. alld. lb. .31 - —

N-N-Dimethylformamide, dms., c.l., t.l., works lb. .32½ - —
dms., t.c.l., works lb. .33 - .34
tanks, works lb. .30 - —
2,4-Dinitroaniline dms. frt alld lb 75 —
Dinitroaniline orange toner, CP, bbls dlvd E of Rockies lb. 1.56 - —
Dinitroaniline orange toner prices 1c higher W of Rockies
m-Dinitrobenzene, 89°C., dms lb. .26 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C. dms. c.l., frt. alld E lb. .17¼ - —
dms., t.c.l., frt. alld. E lb. .17¾ - —
tanks, frt alld. E lb. .17 - —
2,4-Dinitrophenol, bbls lb. .41 - —
2,4-Dinitrotoluene oily dms. lb. .11 - —
Refd. 61°C. dms lb. .23 - —
Dioctyl adipate dms. c.l., works. lb. .42½ - —
dms. t.c.l works lb. .43¼ - —
tanks, works lb. .40 - —
Dioctyl phthalate dms. c.l., frt. alld lb. .27½ - —
dms. t.c.l. frt alld lb. .29 - —
Dioctyl phthalate, tanktrucks, 1,000-1,999 gals., same basis lb. .25½ - —
tankcars, tanktrucks 2,000 gals., same basis lb. .25 - —
Dioctyl sebacate dms. c.l., works. lb. .61¼ - —
dms. t.c.l. works lb. .62¼ - —
tanks works dlvd lb. .59¼ - —
1,4-Dioxane dms. c.l. works lb. .30 - —
dms. t.c.l works lb. .30¾ - —
tanks works lb. .28 - —
Dipentaerythritol, c.l., t.l. dlvd E, lb. .40 - —
bgs. t.c.l., t.t.l., dlvd E lb. .41 - —
Dipentene dest.-dist. dms., c.l., works gal. .59 - —
dms. t.c.l. works gal. .63 - —
dms. t.c.l., ex whse. gal. .79 - —
tankcars works gal. .42 - —
Steam dist., dms., c.l., works, South gal. .72 - —
dms., t.c.l. dlvd New York gal. .91 - —
tanks, works, South gal. .55 - —
Dip oil (see Tar acid oil)
Diphenyl, bgs. c.l., t.l., works lb. .17¼ - —
bgs. t.c.l. works lb. .19 - —
tanks, works lb. .16 - —
Diphenyl oxide, perfume grade cns lb. .65 .85
Diphenyl phthalate dms. c.l., works. lb. .51¾ - —
dms. t.c.l works lb. .53¾ - —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .31 - —
bgs., t.c.l., same basis lb. .33 - —
Diphenylamine, refd., fused, tanks, same basis lb. .28 - —
Refd diphenylamine in dms ½c. per lb higher
Diphenylguanidine bgs., dms., ton lots, frt alld lb. .49 - —
bgs. smaller lots, frt alld lb. .50 - —
Diphenylhydantoin-sodium USP dms. lb. 5.00 5.60
Dipropylene glycol, dms. c.l., frt. alld lb. .17¾ - —
dms., t.c.l., frt. alld lb. .19¼ - —
tanks, frt alld lb. .15¼ - —
Dipropylene glycol methyl ether, dms. c.l. dlvd E lb. .20 - —
dms., t.c.l., same basis lb. .21½ - —
tanks, same basis lb. .18½ - —
Dithiodibenzoic acid, dms., 1,000-lb. lots works lb. 1.45 - —
Di-o-tolylguanidine, dms., ton lots, frt alld lb. .69 - —
dms., smaller lots, frt alld lb. .70 - —
Di-o-tolylthiourea, tech. solid, dms., c.l., t.l., frt alld lb. .55 - —
Divinylbenzene, 20-25%, dms., c.l., works, frt equald lb. .20 - —
dms., t.c.l. same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
dms., t.c.l., works, 100% basis lb 1.05 - —
Dodecylbenzene, dms., c.l. t.o.b., works, frt equald lb. .134 - —
dms., t.c.l. same basis lb. .144 - —
tanks, same basis lb. .114 - —
Dodecylphenol c.l. frt. alld. lb. .22 - —
dms., t.c.l. same basis lb. .23 - —
tanks same basis lb. .19½ - —
Dodecylphenol prices on shipments to Western States are 2c per pound higher

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb and 1-lb. lots, dlvd:
Blue, FD&C, No 1 lb 15.65 -17.60
No 2 lb 15.65 -17.60
Green, FD&C, No 1 lb 15.65 -17.60
No 2 lb 19.60 22.85
No 3 lb 31.30 -35.90
Red, FD&C, No 1, cns. lb 3.90 7.85
No. 2 lb 3.30 4.10
No. 3 lb 19.60 -22.85
No 4 lb 5.55 7.50
Violet, FD&C, No 1, cns. lb 15.65 -17.60
Yellow, FD&C, No 1, cns. lb 9.15 -11.05
No 5 lb 3.30 4.10
No 6 lb 3.30 4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—
Black, D&C, No 1 lb 10.50 -10.95
Brown, D&C, No 1 lb 15.65 -16.10
Green, D&C, No. 5 lb 15.65 -16.10
No 6 lb 15.65 -16.10
No 7 lb 14.35 -14.80
Orange, D&C, No 3 lb 10.50 -10.95
No 4 lb 19.60 -20.05
No 5 lb 3.80 4.25
Red, D&C, No 17 lb 10.50 -10.95
No. 18 lb 23.60 -24.00
No. 19 lb 15.00 -15.45
No. 21 lb 3.90 4.35
No 22 lb 10.50 -10.95
No 23 lb 24.15 -24.65
No 33 lb 17.00 -17.45
Violet, D&C, No 2 lb 15.65 -16.10
Yellow, D&C, No 7 lb 10.50 -10.95
No 8 lb 10.50 10.95
No 10 lb 13.05 -13.50
No 11 lb 13.05 -13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb and 1-lb lots dlvd:—
Blue, Ext., D&C, No 1, cns lb 15.65 -16.10
Green, Ext. D&C, No 1, cns lb 15.65 -16.10
Red, Ext D&C, No 1 cns lb 13.05 -13.50
Yellow, Ext. D&C, No 1 cns lb 10.50 -10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract dlvd No
11110 Brilliant scarlet BN lb 1.70 - —
13390 Fast blue SR lb 1.30 - —
14025 Yellow 2G lb 1.18 - —
14030 Orange R, extra, conc. lb 1.52 - —
14645 Chrome black T lb .73 - —
14720 Rubine XX, conc lb 1.47 - —
15510 Orange Y, extra conc. lb .79 - —
15575 Orange RR lb .94 - —
15620 Fast Red A, conc. lb 1.53 - —
15705 Chrome blue black R, conc. lb 1.07 - —
16150 Scarlet 2RL lb 1.16 - —
16230 Fast light, orange 2G lb 1.39 - —
16255 Brilliant scarlet 3RN, conc lb 1.20 - —
17590 Brown PG lb 3.00 - —
18050 Phloxine 2G lb 1.05 - —
18055 Fuchsine 6B lb 1.55 - —
18965 Fast Yellow 2G lb 2.32 - —

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Dyes, Coaltar—Ethylene Glycol Monobutyl Ether

Dyes coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract dlvd No					
19140	Yellow XX	lb	2.30	-	—
19555	Yellow NN conc	lb	3.67	-	—
20170	Brown Y	lb	1.27	-	—
20470	Blue black extra conc	lb	1.37	-	—
21010	Brown RX conc	lb	1.35	-	—
22240	Scarlet B	lb	2.60	-	—
22310	Red FC	lb	1.45	-	—
22311	Brown MCW	lb	1.40	-	—
22590	Diazo black BHD	lb	93	-	—
22710	Blue 2B extra conc	lb	1.53	-	—
23500	Red 4BX conc	lb	1.80	-	—
24410	Sky blue FF extra conc	lb	1.95	-	—
24895	Brilliant yellow conc	lb	3.11	-	—
26400	Navy blue 3R conc	lb	1.76	-	—
26695	Black F conc	lb	2.19	-	—
27900	Milling Red 3R conc	lb	1.91	-	—
27075	Neutral black 2B conc	lb	2.75	-	—
27720	Gray L	lb	2.08	-	—
29165	Fast scarlet 4BNC	lb	2.12	-	—
30015	Diazo black VJ conc	lb	2.48	-	—
30235	Black EB, 200%	lb	1.33	-	—
30045	Yellow brown K extra	lb	1.26	-	—
30295	Green BY conc	lb	1.02	-	—
35660	Brown B	lb	2.89	-	—
37565	Naphthol SWF	lb	1.76	-	—
40000	Yellow 2G	lb	1.31	-	—
41000	Yellow OX	lb	2.45	-	—
42000	Green V crystals	lb	2.73	-	—
42040	Brilliant green G crystals	lb	3.62	-	—
42090	Blue EG	lb	1.85	-	—
42100	Milling green 6B conc	lb	4.78	-	—
Dyes coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract dlvd No					
42640	Violet 4BXN	lb	2.25	-	—
43820	Brilliant blue BBG	lb	2.44	-	—
44045	Blue B, extra conc	lb	3.61	-	—
45170	Red BX	lb	4.76	-	—
50415	Nigrosine SSJ	lb	1.03	-	—
52015	Blue GXX	lb	2.22	-	—
53185	Black GXCF conc	lb	38	-	—
58005	Alizarin red SC	lb	3.31	-	—
59700	Golden orange GFD single paste	lb	2.70	-	—
59710	Flaming orange 6RD double powder	lb	4.90	-	—
59800	Dark blue BO single paste	lb	2.28	-	—
59825	Jade green NC supra, double paste	lb	1.50	-	—
61570	Alizarin green CG extra	lb	3.53	-	—
63010	Alizarin blue SAPG	lb	3.78	-	—
63615	Alizarin blue black B	lb	3.02	-	—
69825	Blue BLFD double paste	lb	2.82	-	—
70800	Brown BR single paste	lb	2.03	-	—
Dyes coaltar, oil-soluble, 100-lb drums dlvd No					
12140	Oil scarlet BL	lb	1.70	-	—
12055	Oil orange 7078-V	lb	5.87	-	—
26120	Oil red N-1700	lb	1.76	-	—
42535B	Methyl violet base	lb	1.88	-	—
44045B	Victoria blue base	lb	4.06	-	—
50415B	Oil black 8603	lb	80	-	—
61565	Alizarin cyanine green base	lb	6.13	-	—
Dyes, coaltar, oil-soluble, 100-lb. dms., dlvd. No.					
	Spirit black RB	lb	3.89	-	—
	Spirit brown GN	lb	5.30	-	—
	Spirit orange R conc.	lb	5.87	-	—
	Spirit red B conc	lb	6.41	-	—
	Spirit yellow 2R conc.	lb	4.62	-	—
12055	Spirit orange 7078-V	lb	1.25	-	—
	Spirit blue THN	lb	5.06	-	—

E

	Echinacea root, bls	lb	1.10	-	—
	Elm bark, grinding, bls.	lb	30	-	.32
	Powd., bbls. bxs.	lb	45	-	—
	Select bundles	lb	75	-	—
	Emetine hydrochloride, USP bots	oz.	48.40	-	—
	Endrin, tech. dms., t.i., dlvd	lb	3.35	-	—
	Eosin red toner bbls. works	lb	1.85	-	—
	Ephedrine syn., USP, anhyd., bots. 100-oz. lots	oz.	.98		1.00
	hydrous bots 100-oz. lots	oz.	.92	-	—
	Ephedrine hydrochloride, NF, dms.,	oz.	.60	-	.65
	Ephedrine sulfate, USP, cryst., dms.,	oz.	.60		.80
	Powd., dms.	oz.	.60		.80
	Epichlorohydrin, dms., c.l. dlvd	lb	.32½	-	—
	dms., l.c.l. dlvd	lb	.34	-	—
	tanks dlvd	lb.	.30	-	—
	Epsom salt (see Magnesium sulfate).				
	l-Epinephrine base, syn. USP bots. 100 gram lots	gram	.58	-	—
	Erigeron oil, cns.	lb.	11.00	-	—
	Ergot, NF, dms, tin-lined	lb	1.50	-	—
	Eserine salicylate, bots	oz.	54.75	-	—
	Eserine sulfate, bots	oz.	86.00	-	—

	Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis N. C., Ohio St Louis St Paul, Va., W. Va	lb.	.18	-	—
	Ester gum, wood-rosin type dms., c.l., same basis	lb.	.18	-	—
	Ether (see specific product)				
	Ethyl acetate nat. ferment 85-88%, dms. c.l. dlvd	lb.	.15		—
	dms. l.c.l., dlvd	lb.	.16½	-	—
	tanks dlvd	lb	12½		—
	95-98%, dms., c.l., dlvd	lb.	.15¼	-	—
	dms., c.l. dlvd	lb	.15¼	-	—
	dms., l.c.l., dlvd	lb	.16¾	-	—
	tanks dlvd	lb	12¾	-	—
	99% dms. c.l., dlvd.	lb	.15½	-	—
	dms. l.c.l., dlvd	lb	17	-	—
	tanks, dlvd	lb	.13	-	—
	Syn. 85-88% dms. c.l. dlvd	lb	.15	-	—
	dms. l.c.l., dlvd	lb	.16½	-	—
	tanks, dlvd	lb.	.12½	-	—
	95-98% dms., c.l., dlvd	lb.	.15¼	-	—
	dms. l.c.l., dlvd	lb	16¾	-	—
	tanks, dlvd	lb	12¾	-	—
	99% dms., c.l., dlvd.	lb.	.15½	-	—
	dms., l.c.l., dlvd.	lb.	.17	-	—
	tanks, dlvd	lb	13	-	—
	Ethyl acetoacetate, dms., c.l., dlvd	lb	58½	-	—
	dms., l.c.l., dlvd.	lb.	60	-	—
	tanks dlvd	lb	56	-	—
	Ethyl acrylate dms., c.l., t.l., dlvd	lb	36		—
	dms., l.t.l., dlvd.	lb	37	-	—
	tanks dlvd	lb	34	-	—
	Ethyl alcohol, 190 pf., USP, tax paid dms. c.l. dlvd E of Rockies	gal	20.63		—
	dms., t.c.l. same basis	gal	20.68		-20.74
	Ethyl alcohol, 190 pf., USP tax-free, dms., c.l., dlvd E of Rockies	gal.	.68		—
	dms., t.c.l same basis	gal	73		79
	tanks, same basis	gal	52		—
	Ethyl alcohol, absolute 200 pf., tax paid, dms dlvd E of Rockies	gal.	21.75		—
	dms., t.c.l., same basis	gal.	21.80		-21.86
	tanks, same basis	gal.	21.59		—
	Ethyl alcohol, denatured (see Denatured alcohol, ethyl)				
	Ethyl aminobenzoate USP (see Benzocaine).				
	Ethyl amyl ketone dms., c.l., dlvd	lb	.20		—
	dms., t.c.l. same basis	lb.	.21½	-	—
	tanks, same basis	lb	.17½	-	—
	Ethyl benzoate, bots	lb.	.90		—
	Ethyl bromide tech., 98%, dms., c.l., frt., alld. E	lb.	.43	-	—
	dms., t.c.l., frt alld E	lb.	.45	-	—
	tanks, frt alld E	lb.	.41	-	—
	2-Ethyl butyl alcohol, dms., c.l., works	lb.	.30	-	—
	dms., t.c.l., works	lb.	.30¾	-	—
	tanks, works	lb.	.28		—
	Ethyl butyl ketone, dms., c.l. t.l., works	lb.	.36		—
	dms., t.c.l., t.t.l., works	lb.	.36¾	-	—
	tanks, works	lb	.34		—
	Ethyl butyrate, works	lb.	.90		1.00
	Ethyl carbamate (see Urethane)				
	Ethyl cellulose, vis. 7 cps. bgs., 5,000-lb lots or more frt, alld E	lb.	73	-	—
	bgs., smaller lots, frt alld E	lb.	75	-	—
	Ethyl cellulose, vis. to 20, 50 100, 150 cps., bgs., 5,000-lb. lots or more frt alld E	lb.	.68	-	—
	Ethyl cellulose, vis., 10, 20, 50, 100, 150 cps., bgs., smaller lots, frt. alld. E	lb.	.70	-	—
	Ethyl chloride, tech., cyls., works,	lb.	.20		.23
	dms., works	lb.	.18		.20
	tanks, works	lb.	.10		—
	Ethyl cinnamate, cns.	lb.	3.35		3.50
	Ethyl ethanolamines, mixed, dms. c.l., dlvd E	lb.	43½	-	—
	dms., t.c.l., dlvd. E	lb.	44½	-	—
	tanks, dlvd E	lb.	41½	-	—
	Ethyl ether, absolute, ACS dms	lb.	.27	-	—
	Ethyl ether, anesthesia, USP dealers, 1-lb. cns	lb.	1.01	-	—
	½-lb. cns.	lb	1.09	-	—
	¼-lb. cns.	lb.	1.21	-	—
	Ethyl ether, indust., dms., c.l., dlvd.	lb.	.13½	-	—
	dms., t.c.l., dlvd E	lb.	.15	-	—
	tanks, dlvd E	lb.	.11	-	—
	2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E	lb.	.37		—
	dms., t.c.l., t.t.l., dlvd. E	lb.	.38½	-	—
	tanks, dlvd E	lb.	34½	-	—
	2-Ethyl hexoic acid, 1c higher W. of Rockies.				
	2-Ethylhexyl acrylate, c.l or t.l., straight or mixed frt, alld E	lb.	.42½	-	—
	dms., t.t.l., same basis	lb.	.43½	-	—
	tanks, same basis	lb.	.40	-	—
	Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.				
	2-Ethylhexyl alcohol, dms c.l. dlvd.	lb.	.23¾	-	—
	dms., t.c.l., dlvd.	lb.	.25¼	-	—
	tanks, dlvd	lb	.21¼	-	—
	Ethyl iodide, cbys., works	lb.	3.30		—
	Ethyl methacrylate, dms., c.l., frt. equald	lb.	.52	-	—
	dms., t.t.l. frt. equald	lb.	.52½	-	—
	tanks, frt. equald	lb.	.50	-	—
	Ethyl morphine hydrochloride, USP bots	oz.	11.85		—
	N-Ethyl-a-naphthylamine.				
	Ethyl oenanthate, dms	lb.	1.20		1.50
	Ethyl oxalate (see Diethyl oxalate)				
	Ethyl silicate, dist (see Tetraethyl orthosilicate).				
	Ethyl silicate, 40% available, SiO, dms., c.l., dlvd	lb.	44½	-	—
	dms., t.c.l. dlvd.	lb.	.46	-	—
	tanks, dlvd	lb	.42	-	—
	N-Ethyl-a-naphthylamine, dms., works.	lb	1.02	-	—
	N-Ethyl-m-toluidine, tech., liq., tanks, frt. alld	lb.	.83	-	—
	N-Ethyl-o-toluidide, bbls.	lb.	88	-	—
	Ethylamine (see Mono- Di-, or Tri-).				
	N-Ethylaniline dms. c.l., frt. alld.	lb.	.57	-	—
	dms., t.c.l., frt. alld.	lb.	.58	-	—
	tanks, frt alld.	lb.	.55	-	—
	Ethylbenzene 99% dms., c.l. or t.l., frt. equald	lb.	.15	-	—
	dms., t.c.l., same basis	lb.	.17	-	—
	tanks, same basis	lb.	.12½	-	—
	2-Ethylbutyl alcohol, dms., c.l., works	lb.	.30	-	—
	dms., t.c.l., works	lb.	.30¾	-	—
	Ethylene, contract, ref'y gate	lb.	.0475		.0525
	Ethylene dibromide, dms., c.l., frt. equald	lb.	.30½	-	—
	dms., t.c.l. frt. equald.	lb.	.31½	-	—
	tanks, frt equald	lb.	.28½	-	—
	Ethylene dichloride, dms., c.l., dlvd.	lb.	.11½	-	—
	dms., t.c.l., same basis	lb.	.13	-	—
	tanks, same basis	lb	09	-	—
	Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.				
	Ethylene glycol, indust., dms., c.l., dlvd E	lb.	16		—
	dms., t.c.l., same basis	lb.	.17½	-	—
	tanks, same basis	lb.	.13½	-	—
	Ethylene glycol monobutyl ether, dms. c.l., dlvd. E	lb.	22		—
	dms., t.c.l., dlvd. E	lb.	.23½	-	—
	tanks, dlvd E.	lb.	.19½	-	—

Eastman

Alcohols

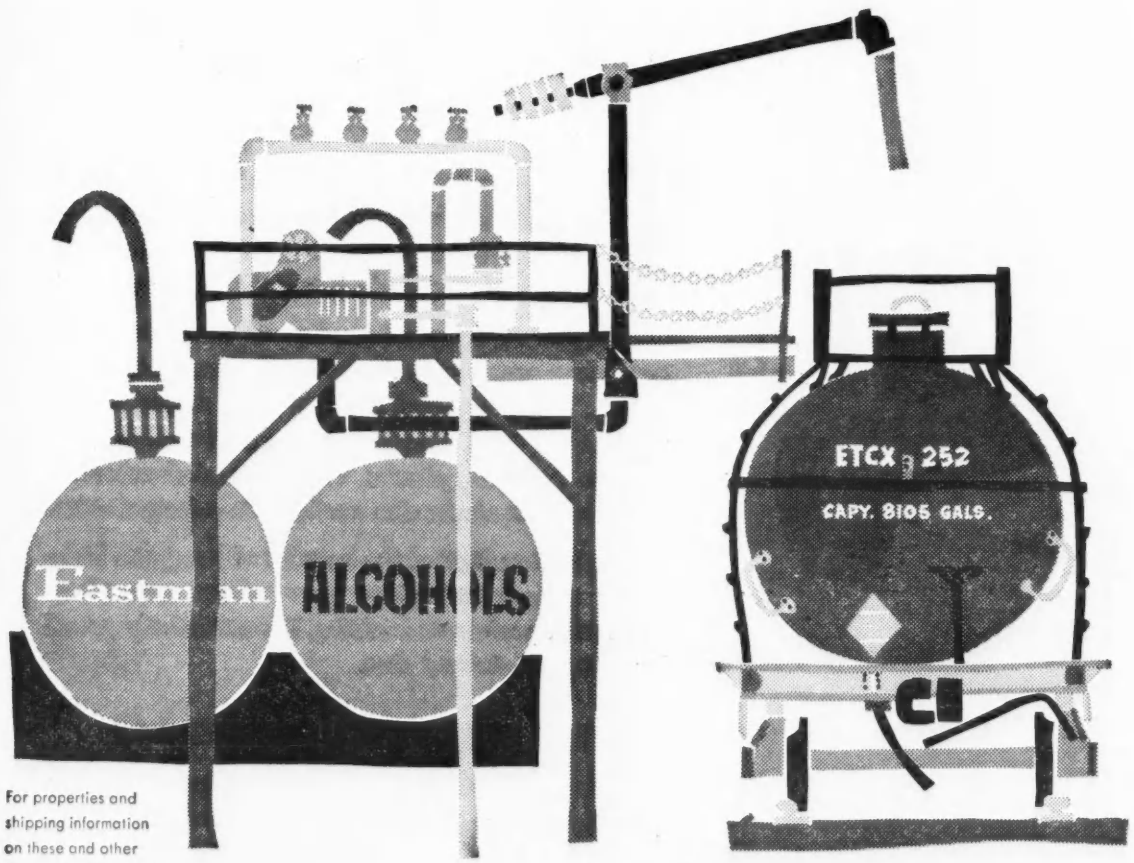
ethyl alcohol
95% and anhydrous

Tecsol®
proprietary ethyl alcohol

isobutyl alcohol

2-ethylhexyl alcohol

2-ethylisohexyl alcohol



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Ethylene glycol monoethyl ether, dms., c.l., divd. E	lb.	.21	—
dms., l.c.l., divd. E	lb.	.22½	—
tanks, divd E	lb.	.18½	—
Ethylene glycol monoethyl ether acetate, dms., c.l., divd. E	lb.	.19½	—
dms., l.c.l., divd E	lb.	.20½	—
tanks divd., E	lb.	.17	—
Ethylene glycol monomethyl ether, dms. c.l., divd. E	lb.	.21	—
dms., l.c.l., divd. E	lb.	.22½	—
tanks, divd. E	lb.	.18½	—
Ethylene glycol monomethyl ether acetate dms., c.l., divd. E	lb.	.29	—
dms., l.c.l., divd E	lb.	.29¾	—
tanks, divd E	lb.	.27	—
Ethylene glycol monostearate, triple pressed, dms	lb.	.33	.35
Ethylene oxide, dms c.l., divd E	lb.	.21½	—
dms., l.c.l., divd E	lb.	.24½	—
tanks divd E	lb.	.15½	—
Ethylene trichloride (see Trichloroethylene)			
Ethylenediamine, 85-88%, dms., c.l., divd E., 100% basis	lb.	.42	—
dms. l.c.l divd E., 100% basis	lb.	.43	—
tanks, divd E., 100% basis	lb	.40	—
Ethylvanillin, 100-lb. fib dms., 500-lb lots and over	lb.	6.75	—
Eucalyptol, USP, cns, dms.	lb.	.90	1.40
Eucalyptus oil NF rectified 70-75%, dms	lb.	.48	.70
NF, rectified 80-85%, dms	lb	.53	.80
Eugenol, tech., dms.	lb	1.45	—
USP, dms.	lb.	2.15	3.00
Euphorbia herb bls	lb.	.12	.15

F

F salt paste, tech., dms. works	lb	2.30	—
Feldspar 140-200 mesh, bulk, c.l., works	ton.	19.50	—
Feldspar in bags $3 per ton higher			
Fennel oil, sweet, USP, cns.	lb.	2.25	2.70
Fennel seed, Argentine bgs.	lb.	.14	—
French light bgs	lb.	.20	—
Indian, light, bgs	lb.	.20	—
Rumanian bgs	lb	.14	—
Yugoslav light bgs	lb.	.16½	—
Fenugreek seed Moroccan bgs	lb	.07½	—
Ferric chloride anhyd., tech., dms., c.l., works 100 lbs.		7.50	—
dms l.c.l. works 100 lbs.		8.50	—
Indust., cryst., bbls c.l., works, 100 lbs		5.25	6.75
bbls. l.c.l. works 100 lbs		5.75	7.25
Ferric chloride, 42° Be., photo grade, cbys., c.l. works 100 lbs.		7.25	8.25
sewage grade, tanks, frt equald, 100% basis 100 lbs.		4.00	—
USP, cryst. dms. t.l. works	lb.	.08½	—
Ferric citrate gran dms	lb.	.86	—
Ferric hypophosphite NF dms	lb.	3.45	—
Ferric naphthenate, liq., 6% Fe, dms. frt alld	lb.	.28¼	—
Ferric oxalate, tech., gran., 50-lb. dm. f.o.b works E	lb.	.89	—
Ferric oxides (see iron oxides).			
Ferric phosphate NF soluble gran pearls, cs	lb.	.72	.75
Ferric pyrophosphate NF VII, soluble, gran. pearls dms	lb.	.79	—
Ferric resinate 6¾% Fe, dms., ton, lots, frt alld	lb.	.35½	—
Ferric stearate dms. c.l. frt alld.	lb.	.39	—
dms., l.c.l., frt alld	lb	.40	.44
Ferric sulfate partly hydrated, bgs. c.l. works	ton.	35.25	—
bgs. l.c.l. works	ton.	36.25	42.25
bulk, c.l. works	ton.	33.25	—
Ferric-ammonium citrate, brown, pearls, NF, gran., dms	lb.	.65	.68
Green pearls, USP XII, gran., dms	lb.	.66	.69
Ferric-ammonium oxalate, fine gran., dms	lb.	.27½	.29½
Ferric-potassium oxalate, fine gran., dms	lb.	.32½	.34½
Ferric-sodium oxalate, fine gran., dms	lb.	.27½	.29½
Ferrous gluconate, USP 200-lb. dm., frt. equald	lb.	96	—
Ferrous sulfate gran., bgs., c.l., works	ton.	34.50	—
bgs., l.c.l., divd Metropolitan area, 100 lbs		3.35	4.25
bbls., c.l., works	ton.	40.00	—
bulk, c.l., works	ton.	27.00	—
USP cryst. bbls. dms.	lb	.09½	.10
Fir balsam Canada bbls.	gal.	32.00	35.00
Oregon bbls	gal.	3.75	4.00
Fir oil, Canada cns	lb.	1.90	3.00
Fish oil, refd., alkali, dms	lb.	.1300	.1350
Kettle-bodied, dms.	lb.	.1530	.1580
Light-pressed, dms.	lb.	.1150	.1200
tanks	lb.	.10	—
Fishliver oil, high potency, 100,000 A units per gram, dms. 1,000,000 units.		.16	—
200,000 A units per gram, dms. 1,000,000 units.		.17½	—
Fishliver oil, high potency, 600,000 A units per gram., dms.,			
Fishmeal, dom. menhaden, 60% protein, grd., bgs. Atlantic coast	ton.	118.00	122.00
Fishscrap, dom., menhaden, dried, 60% protein grd., bgs., Atlantic coast	ton.	114.00	118.00
Fleaseed (see Psyllium seed)			
Folic acid, USP bots. fib dms., kilo or more	gram.	.44	—
10% feed grade fib dms., 3 kilos or more	kilo.	44.00	—
Formaldehyde, 37%, (inhibited 7 to 8% methanol) USP, dms, c.l., divd	lb.	.0670	—
tanks, divd	lb.	.0403	—
Formaldehyde, 37%, (inhibited 12 to 15% methanol), USP, dms., c.l. divd	lb.	.0695	—
tanks, divd	lb.	.0430	—
Formaldehyde, methanol-free (uninhibited) tanks, divd	lb.	.0375	—
Formic acid 85% cbys. c.l., works,	lb.	.1570	—
cbys., l.c.l., works	lb.	.1620	.1720
90%, chys., c.l., works	lb.	.1625	—
chys., l.c.l., works	lb.	.1675	.1775
Fringetree bark bls	lb.	.70	—
Fuller's earth bgs. c.l. Ill. mines,	ton.	19.00	—
Calcined, bgs., c.l., same basis.	ton.	20.00	21.75
Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines.	ton.	17.50	—
Oil-bleaching, grade, 100-mesh, bgs., c.l., same basis	ton.	16.30	17.00
200-mesh bgs., c.l., same basis.	ton.	17.50	18.00
Spent, bgs. c.l. ship't point	ton.	4.50	5.00
Fumaric acid tech 250-lb. dm., c.l., frt. alld	lb.	.27½	—
dms., l.c.l., same basis	lb.	.28¼	—
Prices of fumaric acid 1½c. per lb higher west of Denver.			
Furfural, dms. c.l works	lb.	.13	—
dms., l.c.l., works	lb.	.14	—
tanks, divd E.	lb.	.12	—
tanks divd W	lb.	.13	—
Furfuryl alcohol, dms., c.l., Memphis, Tenn	lb.	1.75	—
alld	lb.	.20	—
dms. l.c.l., Memphis Tenn.	lb	.21	—
tanks, Memphis, Tenn	lb	.184	—
Furfuryl alcohol, dms., c.l., Newark, N. J	lb.	.21½	—
dms., l.c.l., Newark, N. J.	lb.	.22½	—
Fusel oil, refd., dms., c.l., divd	lb.	.18	—
dms., l.c.l., divd	lb.	.19½	—
tanks, divd.	lb.	.15½	—

G

G salt, bbls, frt. alld., 100% basis	lb.	.73	—
Gallic acid, NF VII, bbls. 1,000-lb. lots	lb	2.00	—
bbls., smaller lots	lb	2.02	2.22
Tech., bbls., 1,000-lb. lots	lb.	1.78	—
bbls., smaller lots	lb	1.80	2.00
Gamma acid, dry grd., bbls., frt.			
Paste, bbls. frt. alld	lb.	1.70	—
Gammapicoline (see g-picoline).			
Garlic oil, dom. bots.	oz	4.75	6.05
Imp. bots.	oz	4.50	5.00
Gaultheria oil (see Wintergreen oil).			
Gelatin, edible, pure pork skin, 75 AOAC test, bbls. c.l.	lb.	.53	—
150 AOAC test, bbls. c.l.	lb.	.62	—
200 AOAC test bbls c.l.	lb.	.68	—
225 AOAC test, bbls. c.l.	lb.	.70	—
275 AOAC test, bbls. c.l.	lb.	.78	—
Geisemium root bls.	lb.	.26	—
Gentian root bls.	lb.	.24	—
Grd., bbls., bxs	lb.	.30	—
Powd., bbls. bxs	lb	.30	—
Geraniol extra, cns. dms.	lb	2.00	3.65
Soap grade, dms	lb	1.15	1.95
Standard cns. dms.	lb	2.00	3.40
Geranium oil, Algerian, cns.	lb.	20.50	24.00
Bourbon, cns.	lb.	26.00	29.50
Geranium oil, Turkish (see Palmarosa oil)			
Geranyl acetate, cns	lb.	1.90	2.70
Ginger oil, dist., bots	lb.	10.50	14.00
Ginger oleoresin NF from African root, bots	lb	5.00	5.60
NF, from Jamaican root, bots.	lb	8.75	10.25
Ginger root, Cochin, bgs.	lb.	.16	—
Jamaican, No. 3, bgs	lb	.32	—
Nigerian, split bgs	lb	.13	—
Sierra Leone, bgs	lb	.19	—
Glauber's salt (see Sodium sulfate).			
Gluconic acid, tech., 50% dms., c.l., t.l., frt. alld	lb.	.18	—
dms. l.c.l., frt. alld.	lb.	.20½	—
tanks, frt. alld.	lb.	.13½	—
Glue, hide, 70-94 jellygrams, bgs., c.l., divd	lb.	.17	—
95-121, bgs., c.l., divd.	lb.	.17	—
122-149, bgs., c.l., divd	lb.	.19½	—
150-177, bgs., c.l., divd	lb.	.22	—
178-206, bgs., c.l., divd	lb.	.24½	—
207-236, bgs., c.l., divd	lb.	.27	—
237-266, bgs., c.l., divd.	lb.	.29	—
267-298, bgs., c.l., divd	lb.	.31	—
299-330, bgs., c.l., divd.	lb.	.33	—
331-362, bgs., c.l., divd	lb.	.35	—
363-394, bgs., c.l., divd	lb.	.37	—
395-427, bgs., c.l. divd	lb.	.39	—
428-460, bgs., c.l., divd	lb.	.41	—
461-494, bgs., c.l., divd	lb.	.42	—
495-529, bgs., c.l. divd	lb.	.45	—
Hide glue l.c.l. prices 2c higher			
Glue, bone, extracted, dry bone, 86 jellygrams, bgs c.l. divd.	lb.	.16	—
131 jellygrams, bgs., c.l., same basis	lb.	.16½	—
Glue, bone, extracted, dry bone, 164 jellygrams, ogs., c.l., same basis	lb.	.18½	—
191 jellygrams, bgs., c.l., same basis	lb.	.19½	—
222 jellygrams, bgs., c.l., same basis	lb.	.21	—
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis	lb.	.16	—
86 jellygrams, bgs. c.l., same basis	lb.	.16	—
115 jellygrams, bgs., c.l., same basis	lb.	.16½	—
135 jellygrams, bgs., c.l., same basis	lb.	.17½	—
164 jellygrams, bgs., c.l., same basis	lb.	.18½	—
180 jellygrams, bgs., c.l., same basis	lb.	.19½	—
200 jellygrams, bgs., c.l., same basis	lb.	.20½	—
Bone glue, l.c.l. prices 2c. higher.			
l-Glutamic acid, 99½%, fib. dms., 100-lb lots, frt alld	lb	1.80	—
fib. dms., 25-lb. lots, frt. alld.	lb.	1.88	—
l-Glutamine, bots., 1-9 kilo lots,	kilo.	150.00	300.00
50-kilo lots	kilo.	100.00	—
500-kilo lots	kilo.	75.00	—
Glycerine, dom., nat., crude, saponification, 88%, tanks, divd	lb.	.20½	.21
nat. crude soapiye 80%, tanks, divd	lb.	.18½	.19
Glycerine, imp., nat., crude, soaplye, 80% c.l.f	lb.	.19	.20¼

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ROSSVILLE HEXAGON
Cologne Spirits

Specially fractionated grain spirit. Finest quality — unsurpassed in purity, clarity and freedom from foreign odor. The choice for the finest perfumes, colognes and toilet waters. Available at 190 proof, pure or specially denatured.

ROSSVILLE algrain®

Highly refined grain alcohol. Free from foreign odor and flavor. Meets the most rigid standard of purity. Recommended for use in medicinals, perfumes, toilet waters and flavoring extracts. 190 proof, pure or specially denatured.

ROSSVILLE GOLD SHIELD®

Quality-control process assures uniformly high purity and freedom from foreign odor and flavor. Because of this, Gold Shield is widely used for industrial, scientific, pharmaceutical and cosmetic purposes. Available at 190 or 200 proof, pure or specially denatured.

DENATURED

CSC makes available the more than 50 formulas of specially denatured alcohol authorized by the Bureau of Internal Revenue. These are usually prepared from 190 proof ethyl alcohol but anhydrous formulas are also available. All authorized formulas of completely denatured alcohol also available—either anhydrous, 190 or 188 proof.

PROPRIETARY SOLVENTS

Shellacol®, Quakersol® and Fotocol® and CSC's line of alcohol-type solvents. They possess the valuable solvent properties of the completely denatured alcohols and at the same time offer the additional advantage of mild odor and freedom from objectionable characteristics. Individual data sheets for each of these products are available.

ALL 5... and service too!

Get the type of ethyl alcohol you want . . . in the quantity you want . . . when you want it. Deliveries available in every quantity—tank car, tank truck, compartment tank car, drums or smaller quantities. Pure alcohol also available in pint, quart and gallon bottles. Behind all this a network of denaturing plants, sales offices and distribution points. In other words, all 5 grades and service too! Let us prove it to you.

INDUSTRIAL CHEMICALS DEPARTMENT

COMMERCIAL SOLVENTS CORPORATION

260 MADISON AVE., NEW YORK 16, N. Y.

Atlanta • Boston • Chicago • Cincinnati • Cleveland • Detroit • Kansas City
Los Angeles • New Orleans • Newark • New York • St. Louis • San Francisco

IN CANADA: McArthur Chemical Co. (1958) Ltd., Montreal • IN MEXICO: Comsolmex, S. A., Mexico 7, D. F.

Glycerine, nat., refd, USP CP 99%, dms., c.l. dlvd lb. .30⅞- —
dms., l.c.l., dlvd lb. .31⅜- —
tanks, dlvd. lb. .29⅛- —
96%, dms., c.l., dlvd lb. .30 - —
dms., l.c.l., dlvd lb. .30¾- —
tanks, dlvd. lb. .28¼- —
Nat., high gravity, dms., c.l., dlvd. lb. .30¼ —
dms., l.c.l., dlvd. lb. .31½- —
tanks, dlvd lb. .29 - —
Syn., dms., c.l., dlvd lb. .30½- —
dms., l.c.l., dlvd lb. .31½- —
tanks, dlvd. lb. .29¼- —
Glycine (see Aminoacetic acid)
Glycerol (see Glycerine)
Glycolic acid (see Hydroxyacetic acid).
Glyoxal, 30% dms., c.l. works lb 20½ —
dms., l.c.l. works lb 21¼- —
tanks works lb 18 —
Golden seal root, NF, tested, bls lb. 2.75 - 3.00
Gramicidin 1 to 5 kilos f.o.b works gram 4.70 —
Grapefruit oil dms lb 2.00 2.75
Graphite, amorp, powd., bgs., fib dms, ex whse lb 06 .09½
cryst, 88 90% powd, bgs, fib dms ex whse lb 19 21½
cryst, 90-92%, ex whse lb. .21 - .24½
powd., bgs., fib, dms., ex whse. lb. .29 - .31½
Graphite, flake, No 1 90-95%, bgs., fib dms., ex whse lb. .29 - .31
No. 2, 90-95% bgs., fib, dms., ex whse lb. .29 - .31

Grease, white, choice all hog, tanks, dlvd lb. .06½ Nom.
Yellow, tanks, dlvd lb. .05¼- .05⅜
Grease oil, No. 1 dms, c.l. lb .14¾ Nom.
dms., l.c.l. lb. .15¾ Nom.
lb. .17¼ Nom.
Extra winter strained, dms., c.l. lb. .17¼ Nom.
dms., l.c.l. lb. .18¼ Nom.
Prime, burning, dms., c.l. lb .18¾ Nom.
dms., l.c.l. lb. .19¾ Nom.

GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb bls lb 45 —
Guaiacol, NF, cryst., dms., tins lb. 2.10 - 2.15
NF liq. cbys. dms lb 2.30 2.40
Guaiacol carbonate NF VII, dms. lb 3.40 3.45
Guaiacwood oil cns lb 75 1.30
Guar gum, food grade bgs., c.l lb. .38 - —
bgs., 5,000 lbs. or more lb. .39 - —
Indust., bgs. c.l. lb. .32 - —
Tech grade bgs lb .30 .33

GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of Paris, 100-lb. paper bgs., trucks, dlvd. New York ton. 20.30 - —
Terra alba, dom., 100-lb. paper bgs., trucks, same basis ton. 20.00 - —
100-lb paper bgs., trucks, works, New York ton. 17.00 - —
imp., English, 100-lb. paper bgs., l.c.l., ex dock, New York. ton. 55.00 - —
100-lb paper bgs. ex whse. ton. 60.00 -62.00

H

H acid, dry, bbls, c.l., frt. alld., 100% basis lb. .90 - —
bbls., l.c.l., same basis lb. .95 - —
Hansa yellow 10 G, bbls, dlvd E. of Rockies lb 2.45 - —
Hansa G yellow, pigment bbls lb 2.20 - —
Hawthorn berries, bgs. lb .18 - 20
Heliotropin, 100-lb. lots, dms. lb. 2.60 - 3.40
Hellebore root dom. green, bls lb 70 .75
Helonias root bls. lb. 1.50 - —
Hemlock oil, cns. lb. 2.55 - 3.00
Henbane leaves, bls. lb. .30 - .35
Heptachlor, dms., c.l., t.l., 100% basis, frt. alld lb. .96 - —
Heptane, indust, tanks, Bayonne, N. J gal. .20 - —
tanks, Baytown, Tex. gal. .16¼- —
tanks, Borger, Tex. gal. .16¼- —
tanks, Houston Tex. gal. .16¼- —
Hesperidin purif, 100-lb fib. dms., f.o.b. works lb 8.95 - —
Hesperidin methylchalcone, bots. 50-lb. lots, works lb. 22.50 - —
bots., 5-lb lots, works lb. 23.00 - —
bots., 1-lb lots, works lb. 23.50 - —

Hexachlorophene, dms., 1,100 lbs., or more lb 1.84 - —
dms., to 1,100 lbs lb. 1.94 - —
Hexalin (see Cyclohexanol)
Hexamethylenetetramine, tech. bgs., 20,000-lb. lots or more, Perth Amboy or New York lb. .233 - —
bgs., 1,000-19,999-lb. lots, same basis lb. .243 - —
bgs., smaller lots same basis lb. .253 - —
fib. dms. 1,000-lb lots or more, same basis lb. .250 - —
fib. dms., smaller lots, same basis lb. .253 - —
USP, bgs., 500 lbs or more f.o.b. Fords, N. J., dlvd. New York and Philadelphia lb. .42½- —
bgs., smaller lots, same basis lb. .43½- .48¼
Hexane, indust, tanks Bayonne, N. J gal. .20 - —
tanks, Borger, Tex. dlvd gal. .16 - —
tanks, Houston, Tex. gal. .16 - —
1-Hexanol dms., c.l. works lb .35 - —
dms., l.c.l. works lb. .35¾- —
tanks, works lb. .33 - —
Hexyl cinnamic aldehyde dms lb 4.00 7.50
n-Hexyl methacrylate dms., c.l., works lb. 75½- —
dms, l.c.l. works lb .76 - —
Hexyl salicylate dms lb 1.75 - —
Hexylene glycol, dms, c.l., dlvd lb .17½- —
dms., l.c.l. dlvd lb .19 - —
tanks, dlvd lb 15 - —
Hexylresorcinol, USP dms., 25-lb. lots or more, dlvd lb. 14.00 - —
dms, smaller lots dlvd lb. 14.50 - —
Homatropine hydrobromide, USP bots oz 3.50 - —
Homatropine methylbromide, USP bots oz 3.25 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton 6.75 - —
Horehound herb, bls lb 16 19
Hydrastis (see Goldenseal)
Hydrazine hydrate, 85% ret. dms., works lb 1.35 1.55
100% ret. dms., works lb 1.60 1.90
Hydriodic acid, 1.50 s.g. cbys lb 2.92 —
1.70 s.g cbys. lb 3.23 —
Hydroabietyl alcohol, tech. solid, dms, c.l., dlvd zone 1 lb 29¼ —
dms, l.c.l. dlvd zone 1 lb 29¾ .30¼
tanks dlvd zone 1 lb 27¼ —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas
Hydrobromic acid, medicinal, 45%, cbys. frt equald lb. .48 - .56
Hydrochloric acid, anhyd (see Hydrogen chloride)
Hydrochloric acid 18° cbys., c.l., works 100 lbs. 2.50 - —
cbys, l.c.l. dlvd Metropolitan area 100 lbs 2.90 3.05
tanks, works, frt equald ton. 28.00 - —
20°, cbys., c.l., works 100 lbs 2.75 - —
cbys, l.c.l. dlvd Metropolitan area 100-lbs 3.15 - —
tanks, works frt equald ton 30.00 - —
22°, cbys., c.l., works 100 lbs 3.25 - —
cbys., l.c.l. dlvd Metropolitan area 100 lbs 3.65 - —
tanks works frt equald ton. 35.00 - —
CP, USP, consumers cbys., extra, c.l., works lb. 15¾ - —
cbys. l.c.l. same basis lb 17¼- .17¾
Hydrochloric acid, 5-pint bots., extra cs. c.l. same basis lb. 20¾ - —
Hydrocortisone acetate bulk bots. kilo lots or more gram. 1.15 - 1.20
Hydrocortisone alcohol bulk bots. kilo lots or more gram. 1.15 - 1.20
Hydrocyanic acid, dilute, NF, 2%, 5-lb bots lb. 40 - —
Hydrofluoric acid, anhyd (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd 100 lbs 19 25 - —
55-gal. dms., l.c.l., t.l.t., dlvd 100 lbs 20 75 - —
20-gal. dms., c.l., t.l., dlvd 100 lbs. 21 00 - —
20-gal. dms., l.c.l., t.l.t., dlvd 100 lbs 22 50 - —
tanks, works, frt. equald. 100 lbs. 15 50 - —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2 70 per cwt. for drum delivery.
Hydrofluosilicic acid, dms., works, 30% basis lb. .06 —
Hydrofuramide, dms. fib. ctns., works lb. .30 - .40
50-lb. cyls., l.c.l., works lb. .55 - .60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works lb. .45 - —
Hydrogen cyanide, liq., 98%, tanks, works lb. .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd E lb. .30¼- .32½
cyls. dlvd. W. lb. .29 - —
tanks, works lb. .21 - —
Hydrogen peroxide 35% dms., c.l., dlvd lb. .202 - —
dms., l.c.l., dlvd. lb. .211 - —
tanks, dlvd lb. .1800 —
Hydroquinone, photo grade, dms. lb. 1.10 1.13
Tech., dms., c.l., dlvd. lb. .82½- —
dms. l.c.l. dlvd lb. .84½ - -
Hydroxyacetic acid, tech., 70%, dms., Philadelphia and Chicago lb. .11 - —
tanks, Belle, W. Va. lb. 073 - —
Hydroxycitronellal, cns. lb. 4.20 - 5.10
Hydroxyethyl cellulose, low viscosity grades, 20,000-lb. lots or more, f.o.b. shipping point lb. .96 - —
2,000 to 19,999-lb lots, same basis lb. .99 - —
150 to 1,999-lb. lots, same basis. lb. 1.02 - —
less than 150-lb. lots, same basis lb. 1.12 - —
Hydroxyethyl cellulose high viscosity grades, 20,000-lb lots or more, more, f.o.b. shipping point lb. 1.01 - —
2,000 to 19,999-lb. lots, same basis lb. 1.04 - —
Hydroxyethyl cellulose, 85 to 1,999-lb lots, same basis lb 1.07 - —
less than 85-lb. lots, same basis. lb. 1.17 - —
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots oz. 7.00 - —
Hyoscyamine sulfate, bots oz. 7.00 - —
Hypophosphorous acid, purif 50% cbys., ton lots, f.o.b works lb. .83 - —
NF, 30%, cbys., all quantities, same basis lb. 75 - —

I

Ichthammol, NF, dms. lb 75 1.05
Indigo (see Dyes coaltar, 1171 Indigo, syn).
Indole, CP, bots lb. 14.75 -18.25
Inositol, bots., dlvd. lb 5.00 —
dms., dlvd. lb 4.50 4.75
Insect flowers (see Pyrethrum)
Iodine, crude, kgs lb .95 —
Resub., USP, dms., f.o.b works lb 2.00 2.02
Iodochlorohydroquinolin USP dms lb 3.60 —
Iodoform, NF, dms, kgs. lb 4.90 5.00

Hydrobromic Acid

HBr

48%

62%

HBr

Can help you make drugs, dyes, fluxes, perfumes, photo chemicals

Check these useful reactions: Hydrobromic acid is a strong acid which reacts readily with most inorganic bases to produce inorganic bromides such as lithium, sodium, potassium and ammonium bromide, useful in photographic processes.

It reacts with many aliphatic alcohols in the presence of dehydrating agents to produce aliphatic bromides. Aliphatic bromides, which are generally more reactive than the corresponding chlorides, are useful in the preparation of Grignard reagents and other organometallic bromides, quaternary ammonium salts and as alkylating agents.

Hydrobromic acid can be used to cleave ethers to produce aliphatic alcohol and bromide. It will also react with epoxides to produce vicinal bromohydrins with two reactive centers, thus, permitting many additional reactive possibilities.

Ask for our help: Michigan Chemical produces 48% Technical Grade Hydrobromic Acid and is the sole producer of 62% Technical Grade Hydrobromic Acid in commercial quantities. Our wide experience in bromine and bromine derivatives is immediately available to you through our Technical Service Group. Our plants in Saint Louis, Michigan and El Dorado, Arkansas provide dependable sources for high purity bromine chemicals in constant supply—up to tank car quantities, if desired. Write us about your area of interest or for technical data and prices.

Analysis:	48% Technical
Molecular Weight:	80.924
Specific Gravity at 20/4° C:	1.488
Pounds a gallon at 20° C:	12.4
HCl, not more than:	0.10%
Vapor Pressure at 30° C:	—
Vapor Pressure at 50° C:	—

Analysis:	62% Technical
Molecular Weight:	80.924
Specific Gravity at 20/4° C:	1.74
Pounds a gallon at 20° C:	14.5
HCl, not more than:	0.15%
Vapor Pressure at 30° C:	85 mm
Vapor Pressure at 50° C:	380 mm

For complete listing of Michigan Chemical products, see your copy of Chemical Materials Catalog or Chemical Week Buyers Guide.

MICHIGAN CHEMICAL CORPORATION

630 North Bankson Street, Saint Louis, Michigan

EASTERN SALES OFFICE: 230 Park Avenue, New York 17, N.Y.

Reg. U. S. Pat. Off. MC

C-58-9

a-Ionone, cns. ..... lb. 3.85 - 5.00
b-Ionone, cns. ..... lb. 3.85 - 5.85
Ipecac root, whole, bgs ..... lb. 8.00 - 8.50
Powd., bbls., bxs. ..... lb. 9.50 -10.00
Irish moss, bleached, prime, bls. lb. .22 - .23
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .57 - —
bbls. l.c.l. ton lots same basis. lb. .58 - —
bbls., smaller lots same basis. lb. .59 - —
Iron blue, dom., reg., bbls., c.l., dlvd. E lb. .52 - —
bbls., l.c.l., ton lots, same basis lb. .53 - —
bbls., l.c.l., smaller lots, same basis lb. .54 - —
Imp., British, reg., bbls., c.l., dlvd. E lb. .43 - —
bbls., l.c.l., ton lots, same basis lb. .49 - —
bbls., l.c.l., smaller lots, same basis. lb. .50 - —
Iron blue dlvd. prices 1c. higher for Pacific Coast states:—Wash., Ore., Cal., N. M., Ariz., Mon. Wyo. Utah, Col and Nev.
Iron compounds (see Ferric or Ferrous)
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works ..... lb. .15 - —
Iron oxide, brown pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works ..... lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05¼- —
Iron oxide, Persian Gulf, red, bgs., c.l. works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y lb. .14¼- —
Iron oxide red nat. 75-85% ferric oxide, bgs. c.l. works lb. .06¼- —
bgs. l.c.l. works ..... lb. .06½- —
Iron oxide Spanish red bbls., c.l., ex dock lb. .05¾ Nom.
bbls. l.c.l. ex dock ..... lb. .06 Nom.
bbls. l.c.l. ex whse New York. lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs. c.l., works lb. .06¼- —
Peruvian type bgs. l.c.l lb. .023 - .024
Iron oxide, yellow pure, light lemon shade bgs. c.l. works lb. .12¼- —
Other shades same basis lb. .12 - —
Isoamyl alcohol dms. c.l., works, frt. alld E lb. .27½- —
dms., l.c.l. same basis ..... lb. .29 - —
tanks same basis ..... lb. .25 - —
Isoborneol cns ..... lb. 1.44 - 1.80
Isobornyl acetate, cns ..... lb. .48 - .56
Isobornyl formate dms ..... lb. 1.20 - —
Isobornyl proprionate dms. ..... lb. 1.25 - 1.35
Isobutyl acetate perfume grade, cns lb. .75 - 1.00
Isobutyl acetate solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms. l.c.l. same basis ..... lb. .16¾- —
tanks same basis ..... lb. .12¾- —
Isobutyl alcohol dms. c.l., dlvd. lb. .15½- —
dms., l.c.l., dlvd. ..... lb. .17 - —
tanks, dlvd. ..... lb. .13 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms. l.c.l. dlvd ..... lb. .28½- —
Isobutyraldehyde, tech., dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dlvd. ..... lb. .23 - —
tanks, dlvd ..... lb 19½- —
Isoeugenol, cns. ..... lb. 3.40 - 4.25
Isoniazid powd. kilo or more kilo. 18.00 - —
Isonicotinic acid, 100-lb fib dms., works lb 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms. c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd. E ..... lb. .25 - —
tanks, dlvd E ..... lb. .21 - —
Isopentane, coml. grade, tanks, f.o.b. Tex refy gal. .15½- —
Isophthalic acid dms. c.l., works, frt. equald lb. .152 - —
dms. l.c.l. same basis ..... lb. .162 - —
Isopropanol (see Isopropyl alcohol).
Isophorone, dms. c.l., works ... lb. .24½- —
dms., l.c.l., works ..... lb. .25¼- —
tanks, works ..... lb. .22½- —
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms. l.c.l., same basis ..... lb. .15½- —
tanks, same basis ..... lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., l.c.l., dlvd ..... gal. .60 - —
tanks, dlvd. ..... lb. .42 - —
Refd., 95%, c.l., dms., dlvd. gal. .60 - —
dms., l.c.l., dlvd ..... gal. .70 - —
tanks dlvd. ..... gal. .44 - —
Isopropyl alcohol, refd., anhyd., c.l., dlvd gal. .62 - —
dms l.c.l., dlvd ..... gal. .72 - —
tanks, dlvd ..... gal. .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms. c.l., dlvd lb. .09½- —
dms., l.c.l., dlvd ..... lb. .11 - —
tanks, dlvd ..... lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC), tech., dms., c.l., t.l., works lb. 1.00 - —
dms., l.c.l., works ..... lb. 1.05 - 1.25
tanks, works ..... lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb fib. dms., c.l., t.l., works lb. .75 - —
450-lb fib dms., l.c.l., works... lb. .80 - .90
Isoquinoline, dms., works ... lb. .65 - 1.25
Itaconic acid, refd. bgs. c.l., f.o.b. works lb. .53½- —
bgs., l.c.l., same basis ..... lb. .54½- —
Tech., bgs., c.l., same basis. lb. .38½- —
bgs., l.c.l., same basis..... lb. .39½- —

J

J acid, paste, bbls., works, 100% basis lb. 2.70 - —
Powd. bbls., same basis..... lb. 2.75 - —
Jalap root, NF, bls. ..... lb. .90 - —
NF, powd., bbls., bxs. ..... lb. 1.15 - —
Japan wax, cs ..... lb. .27 - .29
Juniper berries, bgs..... lb. .16 - .17
Juniper berry oil, bots. ..... lb. 2.90 - 3.75
Twice rectified bots. ..... lb. 3.60 - 7.00
Juniper tar oil NF dms ..... lb. .42 - .60
Juniper wood oil, tech., cns. ..... lb. .38 - .55

K

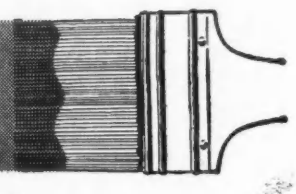
Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms. ..... lb. .10 - .12
NF, colloidal, 50-lb. bgs..... lb. .15¼- .17½
Karaya gum No. 1, NF, powd. bls. lb. .45 - .48
No. 2, powd., bbls..... lb. .40 - .42
No. 3, powd., bbls..... lb. .35 - .37
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs. ..... lb. .10 - —

L

L acid, bbls., works ..... lb. 1.25 - —
Lacquer diluent, petroleum, 150°-240°F. b.r., tanks, east coast, N.J., N.Y. gal. .20 - —
Lacquer diluent, petroleum, 150°-240° F b.r., tanks, west coast, ex tax, Los Angeles gal. .174 - —
Lacquer diluent, benzene type, tanks, group 3 gal. .15125- —
Toluene type, tanks group 3 gal. .14375- —
tanks, Houston, Tex. ..... gal. .16 - —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald. lb. .1985- —
bbls., dms., 20 or more, frt. equald. lb. .2035- —
bbls. dms. 5 to 19, frt. equald. lb. .2085- —
bbls., dms., 1 to 4, frt. equald. lb. .2135- —
80%, bbls., c.l., dms. frt. equald lb. .3333- —
bbls., dms., 20 or more, frt. equald lb. .3385- —
bbls. dms 5 to 19 frt. equald. lb. .3435- —
bbls., dms., 1 to 4 frt. equald. lb. .3485- —
Plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls., 20 or more, works lb. .2790- —
bbls., 5 to 19, works .... lb. .2840- —
bbls., 1 to 4, works ..... lb. .2890- —
80%, bbls., c.l., works..... lb. .4625- —
bbls., 5 to 19, works .... lb. 4725- —
bbls., 1 to 4, works ..... lb. 4775- —
Tech., 44%, bbls., c.l. works 100 lbs. 12.45 - —
bbls., l.c.l., works... 100 lbs. 12.85 - —
USP, 85%, cbys. ..... lb. .83 - —
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
bgs., 6,000-lb. lots, frt. equald lb. .14½- —
bgs., 2,000-lb. lots, frt. equald lb. .14¾- —
bgs., 200-lb. lots, frt. equald lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
Lactose, ferment. grade, bgs., c.l., works lb. .08¼- —
USP, fib. dms., 30,000-lb. lots, frt. equald. lb. .21¼- —
fib. dms., 2,000-lb lots, frt. equald lb. .22¼- —
200-1,880-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c to 1c lower.
Lactose, USP, spray dried, bgs., t.l., frt. equald. lb. .18½- —
bgs., t.t.l., frt. equald ... lb. .19 - .19¾
Lady's slipper root, bls. ..... lb. 3.50 - 3.75
Lake C red toner, alizarine, bbls., works lb. 1.25 - —
Lamp black, bgs., c.l., works ... lb. .16 - .45
Lanolin, cosmetic, dms., works lb. .27 - .29
USP, anhyd., dms., works ... lb. .24 - .26
USP, hydrous, dms., works... lb. .23 - .25
Lard, cash, dms. ..... lb. .0825- —
Lard oil (see Grease oil).
Larkspur seed, bgs ..... lb. .55 - —
Laurel leaf oil, dms. cns. ..... lb. 9.75 -12.50
Laurent's acid, bbls ..... lb. .70 - —
Lauric acid, pure, dms. ..... lb. .39½- .42
tanks ..... lb. .37 - .37½
Lauryl alcohol, bots. ..... lb. 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l., t.l. works lb. .65½- —
dms., l.t.l., works ..... lb. .66 - —
Lavandin oil, 22-24%, dms. ..... lb 1.10 - 1.50
Abrial, dms. ..... lb 1.00 1.50
Lavender flowers, medium, bls lb. .55 - .60
Ord., bls. ..... lb. .20 - .25
Select., bls. ..... lb. .90 - 1.00
Lavender flower oil, USP, French 35-37% ester, cns. lb. 1.85 - 4.00
40-42% ester cns ..... lb 5.00 7.75
Spike, Spanish, cns. ..... lb 2.20 3.00
Lead acetate, NF, cryst., gran., powd lb 34½ —
White, cryst., bbls. ..... lb 25½ —
gran., bbls. ..... lb 26½ —
powd. bbls. ..... lb. 26½ —
Lead arsenate acid powder dealers, 3-50 lb. bgs or any quantity, frt. alld. on $150 or more lb. .30½- —
1-lb bgs. same basis lb. 47 - —
Lead, blue, basic sulfate bbls. c.l., shipt point frt alld. lb. 17 - —
bbls., l.c.l. same basis ..... lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate)
Lead chloride dms. ..... lb. .52 - —
Lead iodide NF V jars ..... lb 3.82 - —
Lead linoleate fused, 26% Pb dms. lb. .38 - —
Lead metal prime, pigs, New York. lb. .13 - —
St. Louis ..... lb. .1280- —
Lead monosilicate, bgs., c.l., works, frt. equald lb .143 - —
bgs. t.c.l., same basis lb. .153 - —
Lead naphthenate, liq., 16% Pb, dms., dlvd lb. .19½- —
24% Pb, dms., dlvd. ..... lb. .24¼- —
Solid, 37% Pb. dms., dlvd. .. lb .31¾ —
Lead nitrate, bbls. ..... lb. .24¼ .26¾
Lead orthosilicate-gel, 50-60% PbO_2 dms., works lb. .29¾ .34¼

Almost any

Surface Coating



can be improved with an alkyd or polyester formulation based on Oronite Isophthalic

Contact your resin or paint supplier. Ask about his alkyd and polyester formulations employing Oronite Isophthalic. Oronite has made available to resin and paint producers a series of suggested Isophthalic alkyd and polyester formulations, together with resin samples, cooking techniques and testing methods. Superior coatings, based on Oronite Isophthalic, are now being offered in every protective coating classification.

Write Oronite, the only experienced Isophthalic source, on how its new basic material can up-grade the coatings you use or market.

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Foreign Affiliate: California Chemical International, Inc., San Francisco, Geneva, Panama

6530

Lead peroxide tech powd bbls lb .45 - .50
Lead phthalate dibasic dms works lb .41 —
Lead, red, 95% Pb O or less, bbls., c.l. works frt equald lb .15¼- —
bbls. l.c.l., same basis lb .16¾- —
97% Pb O, bbls., c.l., same basis lb .1545- —
bbls., l.c.l., same basis lb .1645- —
98% Pb3O4, bbls., c.l., same basis lb .1560- —
bbls., l.c.l., same basis lb .1660- —
Lead resinate precip 23% Pb dms. ton lots dlvd lb .40¼ —
Lead salicylate normal dms. works lb .46 —
Lead silicate (see Lead white basic silicate).
Lead silico-chromate bgs. c.l. f.o.b mfrs. point, frt. alld lb. .20 - —
bgs., l.c.l., same basis lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate liq. 16% Pb dms lb 15 —
24% Pb. dms lb 21¼- —
Solid. 30% Pb. dms lb 23¼- —
Lead, white basic carbonate, bgs., c.l., shipt. pt frt, alld lb. .18 - —
bgs., l.c.l., same basis lb. .19 - —
Lead white basic silicate bgs., c.l., shipt pt. frt alld lb. .16½- —
bgs., l.c.l., same basis lb. .17½- —
Lead white basic sulfate bgs., c.l., shipt. pt., frt, alld lb. .17 - —
bgs. l.c.l., same basis lb. .18 - —

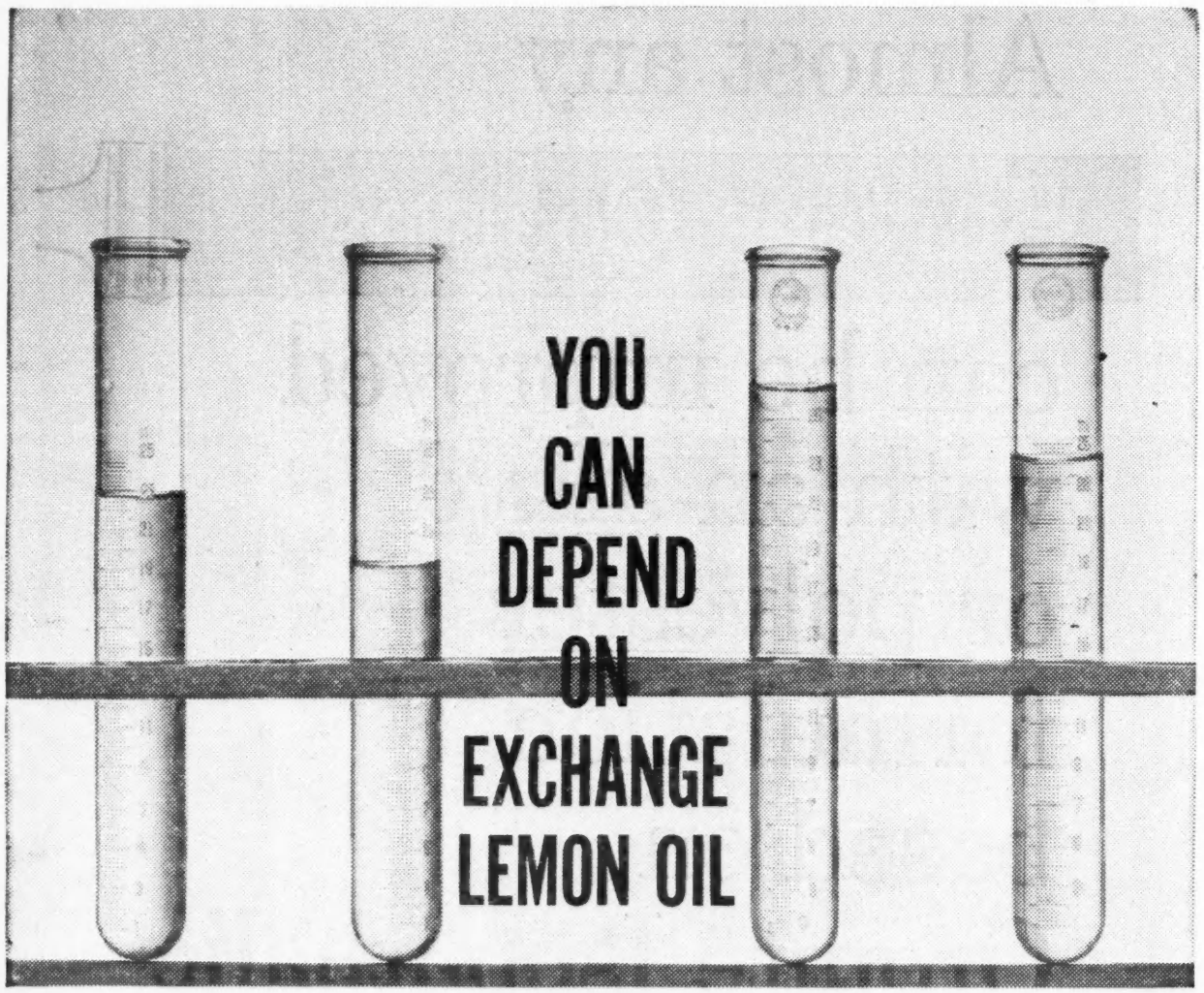
Lecithin, edible, tech., bleached, non-ret dms., c.l. works lb. .14 - .15
non-ret. dms., l.c.l., same basis lb .15 - .16
unbleached, non-ret dms., c.l., same basis lb. .13 - .14
non-ret. dms. l.c.l., same basis lb .14 - .15
Lemon bioflavoroid complex, 100-lb fib dms., works lb 7.70 - —
Lemon oil, USP Calif cns., dms. lb 3.10 3.50
Messina, cns. lb 3.75 3.90
Lemongrass oil, cns., dms lb 1.20 - 1.75
dl-Leucine dms. works lb 12.25 15.00
Licorice root, gran. bls. lb .13 —
Powd. bls. lb .15 .16
Whole bls lb .09 .10
Lignaloe wood oil, Mexican, cns lb 2.75 3.50
Lignosulfonate (see under ammonium or sodium lignin sulfonate)
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton.14.25 - —
Chemical, hydrated bgs., c.l., same basis ton.17.25 - —
Chemical, spray, bgs c.l., same basis ton.18.25 - —
For New York delivery, add $6.29 freight charge
Lime oil, dist., Mexican, cns lb 5.90 - 6.75
West Indian, cns lb 6.50 7.80
Expressed, West Indian, cns lb. 7.75 8.75

Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms. lb 2.90 - 3.75
Syn., 98-100%, dms., works lb 3.20 3.60
Linalyl acetate, ex bois de rose, 92-92%, dms lb 3.05 - 3.75
96-98% dms. lb 3.60 - —
Syn., 98-100%, dms., works lb 3.40 - —
Lindane, 25% formulation to distributors dms. frt alld lb 1.35 1.50
Lindane tech to formulators dms. 1-2,000 lbs. dlvd lb 2.40 - —
Linden flowers, with leaves bls lb 25 - —
Without leaves, bls lb 35 - .40
Linseed meal, expeller 32% bulk Minneapolis mills ton.75.50 - —
Extracted, 34% bulk same basis ton.70.00 - —
Linseed oil raw, dms. c.l. New York lb. .1750- —
dms., l.c.l., New York lb. .1850- .1900
tanks, f.o.b., Minneapolis lb. .1400- —
tanks, New York lb. .1550- —
tankwagon, New York lb. .1600- .1610
Boiled linseed oil, 006c per lb higher.
Linseed oil acid, dist., dms lb. .20 - —
Water-white, dms. lb. .23 - —
Litharge comi., powd. bbls., c.l., works, frt. equald lb. .14¾- —
bbls., l.c.l., same basis lb. .15¾- —
Lithium aluminum hydride, lump, dms. works lb.33.00 39.00
Lithium benzoate, dms lb 1.65 1.67
Lithium bromide, NF, gran. works frt equald lb 2.60 —
Lithium carbonate NF, dms., c.l., t.l., dlvd lb 1.29½ —
dms., ton lots to t.l., dlvd lb 1.30 1.20½
Tech., dms., c.l., t.l., frt alld lb. .67 - —
dms., ton lots, same basis lb. 73 - —
dms., smaller lots same basis lb .79 - —

Lithium chloride, CP, anhyd., dms., ton lots lb. 1.23¼- —
Tech., anhyd., dms., c.l., t.l., dlvd, or works, frt. alld lb. .87 - —
dms., l.c.l., same basis lb. .88 - .95
Lithium citrate, NF, dms. ton lots, lb. 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb 2.15 - —
bbls., ton lots and more dlvd lb 2.18½- —
bbls., less ton lots, dlvd lb 2.23½- —
Lithium hydride, powd., dms., 500-lb lots or more works lb 9.50 - —
Lithium hydroxide, monohydrate, dms, c.l., t.l. frt alld lb. .72 - —
dms., l.c.l. frt alld lb. .73 - —
Lithium manganite dms. works lb. .95 1.05
Lithium nitrate tech. dms., 100-lb lots lb 1.15 1.25
Lithium salicylate, dms lb. 1.60 1.70
Lithium silicate, dms., works lb 1.10 1.20
Lithium stearate, dms. c.l., works, lb .47½ —
dms., ton lots, works lb .48½- —
dms., less-ton lots, works lb .53½- —
Lithium sulfate, dms. 100-lb lots lb. 1.15 1.25
Lithium titanate, dms., works lb 1.15 1.25
Lithol red toner, barium, bbls., works lb .98 - —
Lithol-rubine red toner, pure bbls., works lb 1.50 - —
Resinated, bbls. works lb 1.47 - —
Lithopone ord. bgs. c.l. dlvd E lb. .08¾- —
bgs. l.c.l., dlvd E lb. 09⅛- —
Lithopone, titanated (high-strength) bgs. c.l. dlvd lb. .11 - —
bgs., l.c.l. dlvd. lb 12 - —
Lobelia herb bls lb .55 - —
Loheline sulfate, bots., 50-oz. lots, works oz.30.00 —
Locust bean gum powd. bgs lb .38 .40
Lycopodium, cs lb 4.00 —
l-Lysine monohydrochloride, 25-lb. dms lb. 4.95 - —

M

Mace, Siauw, No. 1, bls lb 2.20 - —
No. 2, whole, bls lb 1.65 - —
siftings, bls. lb. 1.60 - —
Mace oil, dist., cns., dms lb 9.75 12.25
Magnesia calcined tech. bgs., cns., frt equald lb. .25¾ .26½
Tech., syn., rubber grade, light, bgs., c.l., frt equald lb. .28¾- .30
rubber grade, extra light, bgs., c.l., frt equald lb. .28 - —
bgs., t.c.l., frt equald lb .28¾ —
Above prices are quoted f.o.b works, freight equald, with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85%, bgs., c.l., f.o.b. Luning, Nev ton.39.50 - —
91%, bgs., c.l. same basis. ton.49.50 - —
95%, bgs., c.l., same basis. ton.59.00 - —
USP, light bgs. lb. .36½- .37½
USP, heavy, fib. dms lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs c.l., works, frt equald ton.86.25 - —
Chemical grade, deadburnt, standard grain, bulk, c.l., Chewelah, Wash. ton.46.00 - —
Magnesium bromide, cs. bars lb .95 1.00
Magnesium carbonate, tech., bgs., c.l., frt equald lb. .11 - —
bgs., t.l., frt. equald lb. .11½- —
bgs., l.c.l., frt equald lb. .13½- .14
USP, bgs., c.l., frt. equald. lb. 13½- —
bgs., t.l., frt. equald lb .14 - —
bgs., l.c.l., frt equald lb .15 .16
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, dms., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 - .15
Magnesium chloride, hydrous, 99%, flake, bgs., c.l., works.ton.55.00 —
bgs., l.c.l., works ton.65.00 -60.00
Magnesium gluconate, 100-lb. dm., f.o.b works E lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b., works lb. .24¼- .25⅛
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .22½- —
dms., l.t.l., frt. alld lb. .23½- —
tanks, frt. alld lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb. .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs. works frt alld. on carlots lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate tribasic, NF, bbls lb. .75 - —
Magnesium silicate (see Talc)
Magnesium silicofluoride, dms., works lb. .10½- .13
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 - —
bgs., l.c.l., works. 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works. 100 lbs. 2.35 - —
bgs, l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
bgs, smaller lots 100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 - —
fib. dms., 1,000-lb. lots lb. .40 - —
fib. dms., 100-lb. lots lb. .45 - —
Bulky and super grades of magnesium trisilicate 7c. per lb. higher.
Malachite green, straight, PTMA, bbls. works lb. 5.30 - —
Malathion, dms., c.l., works lb. .89 - —
dms., l.c.l., works lb. .92 - 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —
Maleic anhydride, dms., c.l., dlvd. E. of Rockies lb. .28¾- —
dms., l.c.l., dlvd. E. of Rockies lb. .29¾- —
tanks, dlvd E. of Rockies lb. .27¾- —
Prices on maleic anhydride W. of Rockies, 1½c. per lb. higher.
Malic acid, tech., dms. lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb. lots lb. 2.35 - —
dms., smaller lots lb. 2.40 - 2.50
Mandrake root, bls lb. .40 - —
Manganese acetate, dms., dlvd lb. .35 - —
Manganese borate, tech., fib. dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works lb. .11 .16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works lb. .21¾- —
smaller lots, works lb. .23½- —



always pure
absolutely uniform
authentic U.S.P. oil

WHEN JUST AN OUNCE OR TWO of lemon oil can glorify—or ruin—a hundred-pound batch of your product, why gamble?

Use only Exchange Brand Lemon Oil, U.S.P., California Cold-pressed.

Made exclusively from their own California and Arizona lemons by the Sunkist Growers—the people who know citrus best—Exchange Lemon Oil is carefully cold-pressed, skillfully bulk-blended for matchless uniformity.

Sunkist Growers pack and seal every container—from the 7-pound tin to the 395-pound drum—in their own plant, and guarantee every drop to be pure U.S.P. quality oil—unadulterated, unsophisticated. Always look for the word "Exchange" on the tamper-proof container seal.

Exchange

Sunkist Growers

PRODUCTS SALES DEPARTMENT • ONTARIO, CALIFORNIA

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Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., grass for net works ton. 148.00 - —
40,000 to 99,999-lb lots. paper bgs., same basis ton. 144.50 - —
40,000 to 99,999-lb lots, dms. same basis ton. 152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.
Manganese gluconate, dms. lb. 1.84 - —
Manganese hydrate, dms., dlvd lb. .35 - —
Manganese hypophosphite, NF dms. lb. 2.52 - —
Manganese linoleate liq. 4 35% Mn, dms lb. .35¾ - —
Solid, precip., 8.2% Mn. bbls lb. .41¼ - —
Manganese metal, electrolytic, dms., c.l., dlvd E lb. .34 - —
dms., ton lots, dlvd E. lb. .36 - —
dms., smaller lots, dlvd. E. lb. .38 - —
Manganese naphthenate, liq., 6% Mn. dms frt alld lb. .29¾ - —
Manganese resinate fused, 3½% Mn, dms lb. .25¼ - —
Precip., 6½ 7% Mn dms lb. .33 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd S E. ton. 97.50 - —
bgs., t.c.l., dlvd S. E. ton. 104.50 - —
Manganese tallate, 6% dms. lb. .26 - —
Manila copal gum, C, bgs. lb. .35 - .39
DBB bgs lb. .25 - .28
DK, bgs. lb. No stocks.
DK, dust bgs. lb. .14 Nom.
MA, soft bgs. lb. .20 .24
WS, bgs lb. No stocks.
Mannitol com'l fib dms, ton lots, works lb. .60 - —
fib dms to ton lots, works lb. .62 - —
fib dms., single dm., works lb. .65 - —
Marine pitch, dms lb. .04¼ - .05
MBTS (see Mercaptobenzothiazyl disulfide)
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .27½ - —
bgs., t.c.l., works lb. .29 - —
Menadione USP bots gram. .044 .03
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .07¼ Nom.
Menthol nat, USP Brazilian cs. lb. 6.25 6.40
Japanese, cs lb. 7.00 - 7.18
Syn., USP racemic cns lb. 4.50 - —
2-Mercaptobenzothiazole, bgs., fib, dms, ton lots works, frt, alld lb. .44 - —
bgs, fib dms less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide bgs., fib dms, ton lots, works, frt alld lb. .54 - —
bgs, fib dms, less ton lots, same basis lb. .56 - —
Mercuric chloride, NF cryst., dms., 50-lb lots or more lb. 4.98 - —
USP, gran or powd., 50-lb. dm., 100 lbs. f.o.b. works lb. 4.78 - —
Mercuric cyanide, NF VIII, powd., fib dms lb 6.84 - —
Mercuric iodide red, NF, 100-lb. dm., f.o.b. works lb. 7.72 - —
Mercuric oxide, red., NF IX, 50-lb. dm., 100 lbs., f.o.b works lb. 5.97 - —
tech. 50-lb dm. 100 lbs., same basis lb. 5.77 - —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis. lb. 6.14 - —
tech. bbls. 1,000-lb lots lb 5.58 - —
bbls. smaller lots lb 5 60 - —
Mercurous chloride (see Calomel)
Mercurous iodide, yellow, NF, 100-lb. net-flask 224.00 -227.00
Mercury ammoniated (see White precipitate USP XV)
Mercury metal 76 lbs. per flask net-flask 224.00 -227.00
Mesityl oxide, dms., c.l., dlvd lb .15 —
dms., t.c.l., dlvd. lb .16½ - —
tanks, dlvd lb 12½ - —
Meta-aminophenol (see m-Aminophenol)
Metachloroaniline (see m-Chloroaniline)
Metanilic acid dms. works lb 57 75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m Phenylenediamine).
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid glacial, 98%, dms., truckloads, frt. equald lb. .42½ - —
dms., smaller lots, frt. equald, lb. .43 - .75
tanks, works, frt equald lb. .40 - —
Methanol nat. denaturing grade, tanks, frt alld gal. .85 - —
Syn. zone 1, dms c.l or t.l. min., dlvd gal. .51½ - —
dms., t.c.l., dlvd gal. .61½ - —
tankwagon, 2,000-4,000 gal. lots, dlvd Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal min., f.o.b terminal gal. .29 - —
zone 2, dms., c.l, or t.l., min., frt. alld or dlvd gal. .55½ - —
dms., t.c.l., works gal. .65½ - —
tankwagon, 2,000-4,000 gal. lots, min dlvd., Metropolitan area gal. .39 - —
tanks 4,000 gal min dlvd, gal. .34 - —
Synthetic methanol zones are: Zone 1 is all continental US E of eastern boundaries of Ariz., Idaho and Utah Zone 2 is remainder of US west of above state boundaries comprising Ariz Calif Idaho Nev., Ore., Utah and Wash
Methanvrilene fumarate 100-999 lbs., dms., f.o.b works, frt. equald lb. 21 75 - —
Methanvrilene hydrochloride 100-999 lbs. dms., f.o.b works, frt equald lb. 27 25 - —
Methenamine (see Hexamethylene tetramine)
Methionine hydroxyanalogue (calcium salt) 90% min., dms., t.l., frt. alld. lb. 1.10 - —
dms., l.t.l., same basis lb. 1.16 - —
dl-Methionine fib dms. frt alld. 50-lb or more lb 3.50 - —
Feed grade 98% fib dms., same basis lb 1.55 - —
Methyoxychlor 50% wettable powder, dealers, dms., cs lb. .66 - —
Methyl abietate non-rel dms c.l., dlvd zone 1 lb. .21½ - —
non-rel dms t.c.l. same basis lb. 22 .22½
Methyl abietate hydrogenated non-ret dms., c.l., dlvd zone 1 lb. .23½ - —
non-rel dms t.c.l. same basis, lb .24 .24½
Zone 1 includes New England and Middle Atlantic states, Va W Va., N C., Ohio., Ky., Mich., Ind. Ill Wis., St Paul and Minneapolis, Minn.; St Louis Mo; Miss., Ala., Ga., Fla., S C. and Tenn
Methyl acetone, nat. dms., t.c.l., E of Miss., frt alld gal. 62½ - —
Syn., dms., c.l., frt. alld E gal. .66 - —
dms. t.c.l. frt alld E. gal. 76 - —
tanks frt alld E gal 51 —
Synthetic methyl acetone E territory comprises all states East of and including Colo., Mont. N Mex and Wyo. West territory is made up of all states west of those four.

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., t.t.l., dlvd. lb. .40 - —
tanks, dlvd. lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E lb. .17 - —
dms., t.c.l., dlvd. E. lb .18½ - —
tanks, dlvd E. lb. 14½ - —
Methylamyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l., dlvd. lb. .18½ - —
tanks, dlvd. lb. .14½ - —
Methylamyl ketone, dms. works lb 1.05 —
N-Methylaniline tech. tanks frt alld lb 68 —
Methylanthranilate, cns lb. 2.20 2.75
Methyl benzoate cns, dms lb. 65 75
Methyl bromide service organization prices 40 to 375-lb cyls., large lots, frt alld lb. .62 .65
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb bgs., c.l., works lb .82 - —
50-lb. bgs., 2,000-lb lots and more, same basis lb. .89 - —
50-lb bgs. smaller lots, frt. alld on 100 lbs lb 1.05 - —
standard vis. (15,400 cps.), 50-lb. bgs. c.l., frt. alld lb. .69 - —
50-lb bgs., 2,000-lb lots and more, same basis lb. 76 - —
50-lb bgs. smaller lots, frt alld. on 100-lbs lb. 79 .89
Methyl chloride, indust cyls., frt. equald lb. .22¼ —
tanks, multi-unit, same basis. lb. .16¼ - —
tanks, single unit, same basis. lb. .12¾ - —
Methyl chloride, refrigerator mfrs., cyls., dlvd lb. .48¾ - —
other consumers or service men, cyls. dlvd lb 67¾ —

Methyl chloroform (see 1,1,1-Trichloroethane)
Methyl cinnamate, cns lb 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb 15 —
dms., t.c.l., dlvd lb 16½ —
tanks, dlvd lb 12½ —
2-Methyl-5-ethyl pyridine dms., c.l., works lb 45 —
dms., t.c.l., works lb 45¾ —
tanks, works lb 43 —
Methyl formate, refd., dms lb 35 .40
Tech. non-ret dms., any quantity works lb 10 —
tanks, works lb 07 - —
a-D Methyl glucoside, tech. 100-lb multiwall paper bgs. c.l., works lb 21 - —
100-lb multiwall paper bgs., t.l., min 23,000 lbs., works lb 21½ - —
100-lb multiwall paper bgs. l.t.l., works lb .23 - —
Methyl heptin carbonate bots lb 28 00 31.00
Methyl p-hydroxybenzoate fib dms lb 1 90 - 2.09
Methyl ionone standard cns. dms lb 3.40 3.85
Methyl isobutyl carbinol (see Methyl amyl alcohol)
Methyl isobutyl ketone dms., c.l., dlvd lb 17 —
dms., t.c.l., dlvd. lb 18½ —
tanks, dlvd. lb 14½ —

Methyl methacrylate, dms. c.l., t.l. frt equald with Belle, W Va lb 31 —
dms., smaller lots, same basis lb 31½ —
tanks same basis lb 29 —
Methyl naphthyl ketone cryst. cns lb 2.45 4.30
Methyl paranydroxybenzoate (see Methyl p Hydroxybenzoate)
Methyl parathion tech. 80% dms. frt alld E lb 84 —
Methyl parathion prices 2c per lb higher in West
Methyl roseaniline chloride, NF, 5-lb fib dms lb 6 90 —
Methyl salicylate dms, t.l., frt alld lb 60¼ —
dms, t.c.l. same basis lb 62½ 67½
Methyl testosterone USP 100-gram bots gram No Prices.
Methyl violet toner, molybdated PMA bbls. dlvd E of Rockies lb 2 80 —
Methyl violet toner, tungstated, PTMA bbls. same basis lb 4 35 —
Methyl violet prices 1c higher W of Rockies.
Methylene blue fib dms., 100-lb lots, frt adjusted lb 3.25 —
Methylene chloride tech straight or assorted, dms, c.l. or t.l dlvd lb 13½ —
dms., t.c.l., l.t.l. dlvd lb 15¾ —

ONE LABEL — *First Grade Only*

ONE PRICE — *That Saves You Money*

. . . and Perfect Performance for *Every* Purpose!

M. C. P.

Pure
Unadulterated
California

LEMON OIL

U. S. P.

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

Produced and Packed by

MUTUAL CITRUS PRODUCTS COMPANY

Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Methylene chloride, tech., tanks, 4,000-gal min. dlvd lb 12¼ - —
tanktrucks 1,000-gal min., dlvd lb 13¼ — —
b-Methylnaphthalene, 32° C., m.p., dms. works lb 90 — —
Methylpentanediol (see Hexylene glycol)
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone 5)
Methylthionine chloride (see Methylene blue)
Mica, dry grd., paint, plastic, 100 mesh, bgs. c.l. works lb 04 — —
roofing, 20 to 80 mesh, works lb 03 — —
Mica, wet grd., muscovite, bgs. c.l. works, frt. alld. E lb 05½ — —
bgs. l.c.l. ex whse lb 07¼ — —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E lb 08¼ — —
bgs. l.c.l. ex-whse or freight alld. E lb 09 — —
rubber, bgs. c.l. works, frt. alld. E lb 08 — —
bgs. l.c.l. ex whse or frt. alld. E lb 08¾ — —
wallpaper, bgs. c.l. works, frt. alld. E lb 08¾ — —
bgs. ex whse or frt. alld. E lb 09 — —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb .08¼ - — —
Mica, wet grd., W. of Miss. 5c higher; W. of Rockies 1c higher
Microcrystalline wax, petroleum, coating grades, tankcars, works lb 10 .11 —
Microcrystalline wax, petroleum, laminating grades, tankcars, works lb 11 12 —
Mineral black, bgs works lb 0160 0673 —
Mineral oil, white, tech. 50-65 vis., non-ret. dms. c.l., f.o.b. refy gal 62 — —
non-ret. dms. l.c.l., same basis gal 67 — —
tankcars refy gal 46 — —
65-75 vis., non-ret. dms., c.l., same basis gal .62 - — —
tankcars refy gal 46 — —
80-90 vis., non-ret. dms. c.l. same basis gal 63 — —
non-ret. dms., l.c.l., same basis gal .68 - — —
tankcars refy gal 47 — —
125-138 vis. non-ret. dms. c.l., same basis gal 69 — —
non-ret. dms., l.c.l., same basis gal 74 - — —
tankcars refy gal 53 - — —
145-155 vis. non-ret. dms. c.l., same basis gal 75 — —
non-ret. dms., l.c.l., same basis gal 80 - — —
tankcars refy gal 59 - — —
Mineral oil, white USP, 180-190 vis., non-ret. dms., c.l., same basis, gal. 77 - — —
non-ret. dms. l.c.l., same basis gal 82 - — —
tankcars refy gal 61 - — —
200-210 vis. non-ret. dms. c.l., f.o.b. New York gal 84 — —
non-ret. dms., l.c.l., same basis gal .89 - — —
tankcars refy gal 63 - — —
300-350 vis., non-ret. dms., c.l., f.o.b. New York gal .84½ - — —
non-ret. dms. l.c.l., same basis gal 89½ — —
tankcars refy gal 68½ — —
Mineral orange, American, bbls., c.l. works lb .1660- .1670 —
bbls. l.c.l., same basis lb .1760- 1770 —
Mineral spirits, petroleum odorless, tanks refy Watson Calif. gal 25 — —
tanks, Borger, Tex. gal 25 — —
Houston, Tex. gal 25 — —
Newark gal 29 — —
New York gal. 30½ - — —
Philadelphia gal 32 — —
Wood River, Ill. gal 2725 - — —
tankwagon, New Jersey, dlvd. gal 37½ — —
tankwagon New York dlvd. gal 38½ — —
Mineral spirits, petroleum, regular, tanks, Calif., ex tax San Francisco gal 169 — —
tanks, east coast, New Jersey, New York gal .18 — —
tanks, group 3 gal 12875 — —
tanks, Houston, Tex. gal .145 — —
tankwagon Boston gal 20 — —
Buffalo gal 20½ — —
Chicago gal 289 — —
Cleveland gal 23½ — —
Newark gal 19 — —
New York gal. .19 - — —
Philadelphia gal 19½ — —
Pittsburgh gal 19 — —
Providence gal 20½ — —
Mirbane oil (see Nitrobenzene)
MNPT maroon toner, kgs. c.l., works lb 6.30 — —
Molasses, blackstrap, teco grade, tanks, New Orleans gal. .09¾ - .10 —
tanks New York ga .6 — —
Molybdated orange, bbls lb .8 — —
Molybdenum metal powd. 80 or 200 mesh, cins. works kilo 7.84 — —
325 mesh cins works kilo 9.13 — —
Molybdenum trioxide, purit., dms. works lb 1.15 — —
Tech. chemical dms. works basis Mo. content lb 1.48 — —
Molybdenum trioxide, tech., metallurgical, dms., works, basis Mo. content lb. 1.47 - — —
Molybdic acid, 85% dms. works lb 1.05 1.15 —
Monoallylamine, dms., c.l. dlvd lb 965 — —
dms., c.l., dlvd lb 995 — —
tanks dlvd lb 96 — —
Monobutylamine, dms., c.l., dlvd E of Rockies lb .57½ — —
dms. l.c.l. same basis lb 59 — —
tanks, same basis lb 55 — —
Monotert-butyl-m-cresol, dms., c.l., works lb 55 — —
dms. l.c.l. works lb 56 - — —
tanks, works lb 54 - — —
Monochloroacetic acid, purit (see Chloroacetic acid, mono)
Monochlorobenzene, dms. c.l., frt. alld or dlvd E lb 10½ — —
dms. l.c.l. same basis lb 11½ — —
tanks same basis lb 08¾ — —
Monoethanolamine, dms. c.l. dlvd E lb 27½ — —
dms., l.c.l., same basis lb 29 - — —
tanks same basis lb 25 — —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine)
Monoethylamine, 70% aqueous, solution, dms. c.l. dlvd E 100% basis lb 38½ — —
dms. l.c.l. dlvd E 100% basis lb 40 — —
tanks, dlvd E, 100% basis lb 35 - — —
Monoethylaniline (see N-Ethylaniline)
Monoethylorthotoluidine (see N-Ethyl-o-toluidine)

Monoisopropanolamine, dms., c.l., dlvd E lb. 27½ - — —
dms., l.c.l., same basis lb. 29 - — —
tanks, same basis lb. 25 - — —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. 33½ - — —
dms. l.c.l. same basis lb 35 - — —
tanks, same basis lb. 31 - — —
Monomethylamine, anhyd., cyls., l.c.l. frt. equald., 100% basis lb 30 — —
tanks, 100% basis lb. .26 - — —
30-35% soln. dms., c.l., frt. equald., 100% basis lb. 35 — —
dms. l.c.l. frt. equald., 100% basis lb. 36½ - — —
tanks frt. equald. 100% basis, lb. 26 - — —
Monomethylamine, 40% soln. dms., frt. equald., 100% basis, lb. .33 - — —
dms. l.c.l. frt. equald. 100% basis lb .33½ - — —
tanks, frt. equald, 100% basis lb. .26 - — —
Monopentaerythritol, tech., bgs. c.l., dlvd E lb 31 - — —
bgs., l.c.l., dlvd E lb 32 - — —
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld lb 3.05 - — —
dms. 100-lb. lots, same basis lb 3.25 — —
Monosodium glutamate, dms. 100 lbs., dlvd lb. 1.00 - 1.15 —
Monosodium phosphate (see sodium phosphate, monobasic)
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - — —
dms., l.c.l., same basis lb .56 - — —
tanks, same basis lb. .54 - — —
Montan wax, Calif., refd. bgs lb. .27 - .28 —
imp. crude Bohemian bgs lb 22 24 —
German bgs lb 26 27 —
Morphine, cns oz. 12.40 12.60 —
Morphine acetate anhyd. cns oz 9.95 10.00 —
Morphine hydrobromide, cns oz 9.90 9.95 —
Morphine hydrochloride, NF cns oz 9.90 9.95 —
Morphine sulfate USP cns oz 9.90 10.05 —
Morpholine, dms. c.l. dlvd E lb. 55¼ — —
dms. l.c.l. dlvd E lb. 56¼ - — —
tanks, dlvd E lb. 52¾ - — —
Muriatic acid (see Hydrochloric acid)
Musk, syn. ambrette, fib dms., 100-lb lots lb 4.40 4.90 —
cns., 25-lb. lots lb. 4.50 5.00 —
Ketone, fib. dms., 100-lb. lots lb. 4.60 5.10 —
cns., 25-lb. lots lb 4.70 5.20 —
Xylol, fib. dms., 100-lb. lots lb. 1.26 - — —
cns., 25-lb. lots lb. 1.40 - — —
Mustard seed, Danish, yellow, bags. lb 11½ - — —
Montana, yellow, bgs lb .10½ - — —
Oriental, bgs lb .08 — —
Mustard oil, syn. bots. lb 1.60 1.85 —
Myristic acid, bgs, lb. .33 - .35½ —
tanks lb. .32 - — —
Myrrh gum, cs lb. 55 - — —

N

Naphtha, high solvency (see Solvent naphtha petroleum)
Naphtha, petroleum, cleaner's (see Cleaner's naphtha)
Naphtha, VM&P petroleum, 225°-300°F., b.r., tanks, west coast, Los Angeles gal. .174 — —
Portland, Ore gal. .18 - — —
San Francisco gal. .179 - — —
Seattle, Wash. gal. .18 - — —
east coast, New Jersey and New York gal. .19 — —
group 3 gal. 13875 — —
tankwagon, Boston gal. 21½ - — —
Chicago gal. .299 - — —
Cleveland gal. 24½ - — —
Houston, Tex. gal. 15½ - — —
Newark gal. 20½ - — —
New York gal. 20½ - — —
Philadelphia gal. 21½ - — —
Pittsburgh gal. 20 - — —
Naphthalene, crude, dom., 74°, tanks, frt. equald lb. .04¼ - — —
78° tanks, same basis lb. .05 - — —
imp., 78°, bgs., large lots lb. .09½ Nom. —
Refd., indust., chipped, crushed, bgs., frt. equald lb. .12½ - — —
tanks, same basis lb. .09¾ - — —
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., stme basis lb. .15½ - — —
cs. 50 lbs. c.l. same basis, lb. .15¾ - — —
1-lb. pkgs. c.l. same basis, lb 18½ - — —
a-Naphthol, dms., frt. alld. lb. 1.00 - — —
b-Naphthol, tech. flake, bbls., c.l., works lb .33 - — —
bbls. l.c.l. works lb .35 - — —
Naphthol ITR red toner, bbls. works lb 5.50 - — —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)
1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid)
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 4-amino acid (see S acid)
2-Naphthol-6,8-disulfonic acid (see Gamma acid)
Naphthol sulfonic mixed acid (see Cleve's acid)
a-Naphthylamine, dms., frt. alld lb. .50 - — —
b-Naphthylamine, tech. flake, bbls., works lb 1.60 - — —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid)
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid)
2-Naphthylamine-6-sulfonic acid (see Broenner's acid)
2-Naphthylamine-7-sulfonic acid (see F acid)
Naringin, fib. dms lb 8.50 — —
Neatsfoot oil, 15° cold test, dms lb. .30 Nom. —
20° cold test, dms lb. .29 Nom. —
30° cold test, dms lb. .28 Nom. —
Neocinchophen, USP, dms., frt. adjusted lb 7.00 8.00 —
Neomycin sulfate, fib. dms. 1-kilo basis activity gram .25 — —
fib. dms., 100-999-gram lots, basis activity gram .30 - — —
Tech., fib. dms gram .14 - — —
Neroli oil, NF, French, bots. lb. 425.00 - 575.00 —
Tunisian, bots lb 400.00 — —
Nerolin, cns. lb. 2.45 - 2.85 —
Neville and Winther's acid, dms., frt. alld lb 1.30 — —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls. dlvd lb .68½ 75½ —
Nickel carbonate, bbls. dlvd lb 78¼ 85¼ —
Nickel chloride, bbls. dlvd lb .37 .45 —
Nickel formate, bbls. ton lots, frt. alld lb .72 .73 —
Nickel metal, electro cathodes, cs., works lb .74 — —
Nickel nitrate, dms., frt. alld lb .31 - .33½ —
Nickel oxide, black, bbls lb 85 — —
Green, bbls lb 84 — —
Nickel sulfate, bgs. c.l. dlvd lb .28 — —
bgs. l.c.l. dlvd lb 28½ .30 —
Nicotinamide, USP, 50-kilo dm., frt. adjusted kilo 8.00 - — —
Nicotinamide hydrochloride, dms., frt. adjusted kilo. 8.00 - — —
Nicotine sulfate, 40% dealers, 50-lb. dms. frt. alld lb. 1.20 - — —
40% manufacturers, 500-lb. dms., frt. alld lb 1.05 - — —
Nicotinic acid, USP, dms. dlvd kilo 6.00 - — —
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs lb .10¼ - — —
Nikethamide, cbys lb 5.00 - — —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs 5.75 — —
cbys. l.c.l. works E 100 lbs 6.05 6.85 —
38° Be., cbys., c.l., works E. 100 lbs. 6.25 - — —
cbys., l.c.l. works E. 100 lbs 6.55 7.35 —
40° Be., cbys. c.l. works, E 100 lbs 6.75 — —
cbys., l.c.l., works, E. 100 lbs 7.05 7.85 —
42° Be., cybs., c.l. works, E. 100 lbs. 7.25 — —
cbys. l.c.l. works E 100 lbs. 7.55 8.35 —
Nitric acid, 58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs 3.90 — —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs 4.90 — —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½ - — —
cbys extra l.c.l. works lb. .20 — —
5-pint bots. extra cs. c.l., same basis lb. .22½ - — —
5-pint bots. extra cs., l.c.l., same basis lb. .24 .25 —
4-Nitro-2-aminophenol, tech. paste, dms., frt. alld lb. .99 - — —
m-Nitroaniline, crvst., dms., frt. alld lb 1.15 - — —
Paste, dms. frt. alld. 100% basis. lb 1.10 - — —
o-Nitroaniline, flaked, dms. t.l. frt. alld lb. 49 - — —
dms. t.l. frt. alld lb. .51 - — —
o-Nitroaniline, orange toner, kegs, lb. 1.35 - — —
p-Nitroaniline, dms. frt. alld lb. .445 — —
o-Nitroanisole, tech., tanks frt. alld. lb. .36 - — —
p-Nitroanisole, tech., solid, dms., frt. alld lb. .72 - — —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .13 - — —
dms. l.c.l. frt. alld lb. .14 - — —
tanks, frt. alld lb. .11 - — —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - — —
dms. l.c.l. works lb .64 - — —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls. c.l. works lb. .37½ - — —
bbls., l.c.l., same basis lb. .33½ - 40½ —
18-20 cps., bbls. c.l., same basis lb. .39½ - — —
bbls. l.c.l. same basis lb. 40½ - 42½ —
250-400, 600-1,000 seconds, bbls., l.c.l., same basis lb. .43 46 —
Nitrocellulose, spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis lb. .43 - — —
bbls. l.c.l. same basis lb .44 46 —
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .42 - — —
bbls. l.c.l. same basis lb .43 45 —
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable
o-Nitrochlorobenzene, dms. c.l., frt. alld lb. .15 - — —
dms. l.c.l. same basis lb. .16 - — —
tanks, same basis lb. .13 - — —
p-Nitrochlorobenzene, dms lb. 26 .27 —
2-Nitro-p-cresol, tech., dms., dlvd. lb .88 — —
Nitroethane, dms., c.l., dlvd. E lb. .25 - — —
dms., l.c.l., dlvd E lb. .26½ - — —
tanks, dlvd E lb. .22½ - — —
Nitroethane prices West of Rockies are 1c higher
Nitrogen solutions, tanks, frt. equald., N unit. 1.24 - — —
Nitrogenous process tankage, bulk, works unit-ton. 4.50 Nom. —
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works unit-ton 3.10 .50 —
Nitromethane, dms. t.l. dlvd E lb. .25 - — —
dms. t.l. dlvd E lb. .26½ - — —
Nitromethane prices West of Rockies are 1c higher
a-Nitronaphthalene, bbls. frt. alld. lb. .31 - — —
o-Nitrophenol, dms., works, frt. equald lb. .94 - — —
p-Nitrophenol, dms. c.l., frt. alld. lb. .45 - — —
dms. l.c.l. frt. alld lb. .47 - — —
1-Nitropropane, dms., c.l., frt. alld. E of Rockies lb. .23½ - — —
dms. l.c.l., same basis lb. .25 - — —
tanks, same basis lb. .21 - — —
2-Nitropropane, dms. c.l., frt. alld. E of Rockies lb. .18½ - — —
dms. l.c.l. same basis lb. .20 - — —
tanks, same basis lb. .16 - — —
Nitropropane prices West of Rockies are 1c. per lb. higher.
m-Nitrotoluene, tech., dms. frt. alld. lb. .45 - — —
o-Nitrotoluene, dms. c.l. frt. alld. lb. .15 - — —
dms., l.c.l. frt. alld. lb. .16 - — —
tanks, frt. alld lb. .13 - — —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½ - — —
dms., l.c.l., works lb. .28 - — —
flake, dms., c.l., t.l., works lb. .27½ - — —
dms., l.c.l., works lz. .28 - — —
m-Nitro-p-toluidine, dms. lb 1.25 — —
Nonylphenol, dms. c.l., frt. alld. lb. .22 - — —
dms. l.c.l. frt. alld lb. .23 - — —
tanks, frt. alld lb. .19½ - — —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East Indian, whole, bgs. lb. 1.36 - — —
West Indian, bgs lb. 1.45 - — —
Nutmeg oil, USP, dist., East Indian, cns lb. 9.50 -12.75 —
West Indian, cns lb. 9.50 -12.75 —
Nux vomica, bls lb. .20 - — —
Powd., bbls., bxs lb. .20 - .22 —

O

Ocher (see Iron oxide, yellow, nat.).
Ocotea cymbarum oil, dms lb. .43 - .55 —
Octane, indust., tanks, Bayonne, N.J. gal. .20 - — —
Borger, Tex. gal. .15¾ - — —
1-Octanol, tech., dms. c.l., dlvd., Zone 1 lb. .43½ - — —
dms., l.c.l., dlvd. Zone 1 lb. .45½ - — —
tanks, dlvd., Zone 1 lb. .41 - — —
Octyl alcohol, perfumery grade, bots lb. 1.60 3.25 —
Octyl alcohol, tech, (see 1-Octanol, tech)
Octyl phenol, bgs., c.l., works lb. .22 - — —
bgs., l.c.l., works lb. .22½ - — —
tanks, works lb. .21 - — —
Octyl phenol in dms. 11c. higher.

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms. lb. .22 .22½ —
tanks lb. 20½ — —
Oleic acid, dbl.-dist. (white), dms. lb .18 .20¼ —
tanks lb .15½ — —
Single-dist., dms. lb .16¾ .19½ —
tanks lb .14¼ — —
Oleo oil, extra, dms. lb. .13½ .14 —
Oleostearine, dms. lb. .12¼ - .12¼ —
Oleum (see Sulfuric acid, fuming)
Olibanum gum, siftings, cs. lb .13 .20 —
Tears, cs. lb .22 .30 —
Olibanum oil, bots. lb 5.00 7.65 —
Extra fine, bots lb 8.00 9.50 —
Olive oil, edible, dms. spot, duty paid gal. 2.40 - 2.50 —
Olivine, crude, works ton 12.00 — —
20 mesh, works ton 15.00 — —
100 mesh, works ton 20.00 — —
Opium, USP, cns oz. 19.20 19.45 —
gran., cns. oz. 21.65 21.90 —
powd., cns oz 21.65 21.90 —
Orange oil, expressed, USP, Brazilian, cns., dms lb No stocks. —
California, cns., dms lb .85 .90 —
Florida, cns., dms lb .70 1.25 —
Messina, cns lb ¼ 25 5.00 —
West Indian, bitter, cns., dms lb 2.50 3.25 —
Sweet, dist., cns., dms lb .60 — —
Orange peel, bitter, Haitian, bls lb. .14 - .15 —
Sweet lb. .28 - .30 —

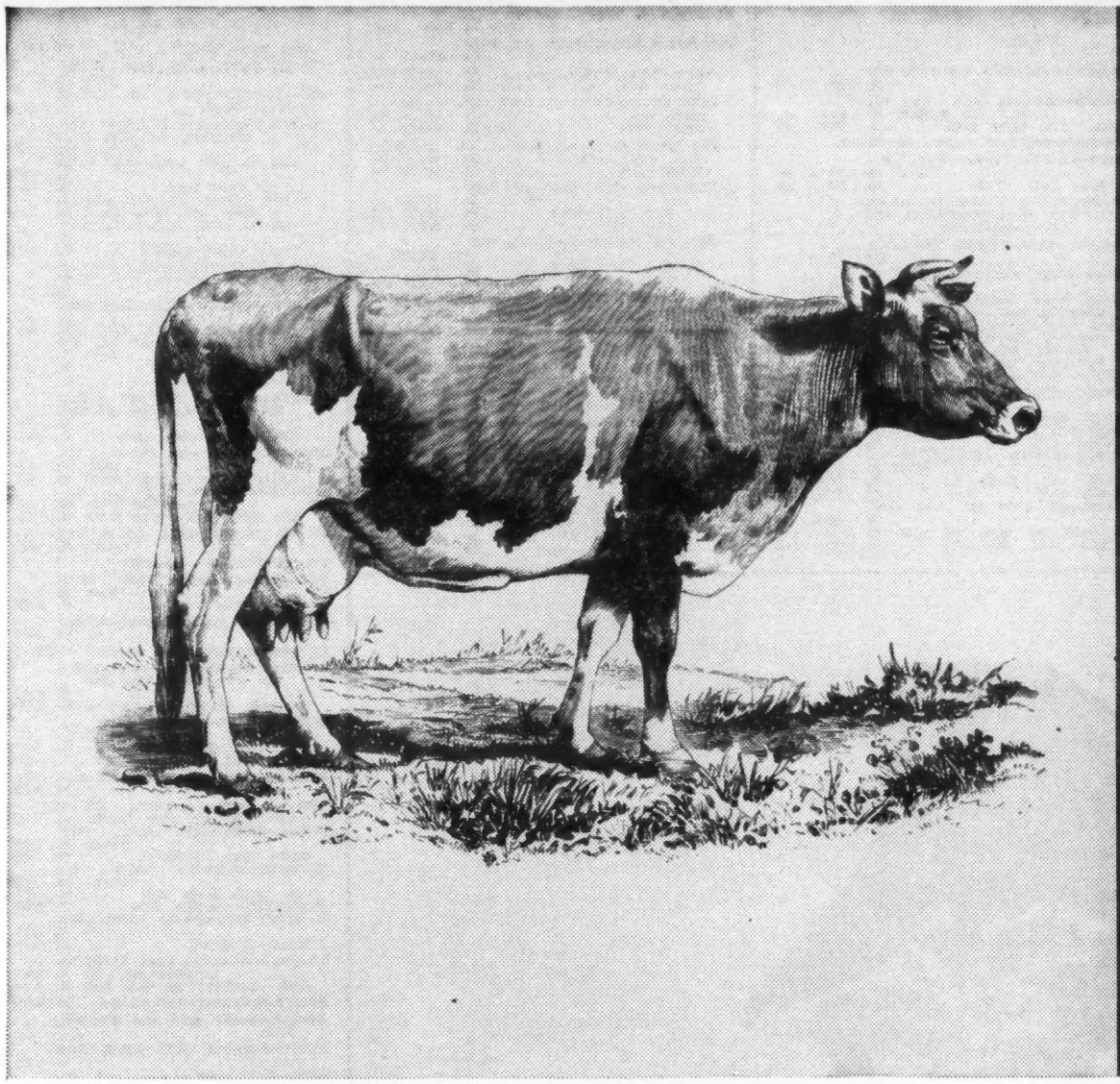
ORANGE PIGMENTS

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns lb 1.80 2.30 —
Orris root, Florentine, bls lb .55 — —
powd., bbls., bxs lb .65 - — —
Verona, bls. lb .35 - — —
powd., bbls., bxs lb .45 - — —
Orthoanisidine (see o-Anisidine)
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid)
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline)
Orthochlorophenol (see o-Chlorophenol)
Orthocresol (see o-Cresol)
Orthocresotinic acid (see 2,3-Creosotic acid)
Orthodichlorobenzene (see o-Dichlorobenzene)
Orthonitroaniline (see o-Nitroaniline)
Orthonitrochlorobenzene (see o-Nitrochlorobenzene)
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol)
Orthonitrophenol (see o-Nitrophenol)
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base)
Orthotoluidine (see o-Toluidine)
Ouabain, USP, bots. gram 3.00 4.00 —
Ouricury wax, crude, bgs. lb. .70 - .72 —
Refd., pure, bgs lb. .78 - .80 —
Oxalic acid, bgs. dms. c.l., works. lb. .18 .18¼ —
bgs., dms., 10,000-lb. lots, works. lb. .18¼ - .18¾ —
bgs., dms., smaller lots, works. lb. .19¼ - .19¾ —
b-Oxynaphthoic acid, fib. dms., 250 lbs. or more, frt. alld. lb 1.14 1.17 —
Oxyquinolin sulfate, cns., 100-lb lots, works, lb 4.75 5.00 —
cns., smaller lots, works lb. 4.92 5.17 —

P

Palm oil, clarif., dms. lb. .1425- .1525 —
tanks lb. .1170- — —
Palm oil acid, dist., dms. lb 15¾ .19¼ —
tanks lb. 13¾ - 14¼ —
Palmarosa oil, cns. lb. 3.45 - 3.75 —
Papain, NF, powd. lb. 5.50 -10.00 —
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 — —
cns., smaller lots oz 5.05 5.20 —
Papaverine sulfate, nat. or syn., USP, cns., oz. 7.10 7.35 —
Paprika, Bulgarian, bgs lb. .34 - .35 —
Hungarian, bgs. lb. .32 - — —
Spanish, bgs. lb. .50 — —
Yugoslavian, bgs. lb. .34 — —
Para-aminobenzoic acid (see p-Aminobenzoic acid)
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen)
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid)
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2-nitroaniline)
Para-anisidin (see p-Ansidine)
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde)
Parachlorophenol (see p-Chlorophenol)
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls. lb 1.21 — —
Chlorinated, kgs lb 1.35 - — —
Paraffin, crude, scale, white, 123°-127°F. ASTM, tanks, refy. lb. .0655- — —
Paraffin, fully refd., 122°-124°F, ASTM,, tanks, refy lb. .0765- — —
125°-127°F, ASTM, tanks, refy. lb. .0765- — —
130°-132°F, ASTM, tanks, refy. lb. .0765- — —
132°-134°F., ASTM, tanks, refy. lb. .0765- — —
135°-137°F., ASTM, tanks, refy lb. .0765- — —
AMP temperatures are an arbitrary 3°F higher than ASTM
Paraffin oil, pale, 100-110 vis. at 100°F., tanks, east coast refy gal. .14 - — —
Paraffin wax (see Paraffin)
Paraformaldehyde 91% flake, bgs., c.l., frt. alld lb. .10 - — —
bgs., l.c.l., frt. alld lb. .12 - .13 —
91%, powd., bgs., c.l., ex whse. lb. .1715- — —
bgs., l.c.l., ex whse lb. .1865- — —
USP-X, fib. dms., c.l lb. .19 - — —
fib. dms., 1,000-lb. lots lb. .20 - — —
fib. dms., smaller lots lb. .21½ - — —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd lb. .14 - — —
55-gal. dms., l.c.l., dlvd lb. .15 - — —
tanks, dlvd lb. .11½ - — —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene.
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).



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Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol)
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion ethyl. dms. frt alld lb .84 - —
Parathion prices 2c per lb higher in West
Paratoluenesulfonamide (see p-Toluenesulfonamide)
Paris green dealers 100 lb dms., frt alld lb .45 - —
Passion flower herb, bls lb. .35 - —
Patchouli oil, imp cns lb 4.80 5.25
Peach kernel oil USP (see Apricot kernel oil)
Peacock blue fugitive, 100% color strength 250-lb. bbls., dlvd E of Rockies lb 1.00 - —
Peacock blue price 1c higher W of Rockies
Peanut meal, 45% old process, bgs., mills ton 67.50 Nom.
Peanut oil crude, tanks, f.o.b mills lb. .12½- —
Refd., dms. lb. .17¾- .18
tanks lb. .15¾- —
Pectin dom. NF citrus powd. bbls lb 2.05 2.06
tech. powd. 150 jelly grade lb 1.28 - —
Imp Danish ex whse lb 1.28 —
Penicillin potassium wet bulk 1,000,000 units .023 .025
Penicillin, procaine n 1,000,000 units .023 025
Pennyroyal oil USP, imported, cns. lb. 2.25 - 3.10
Pentachlorophenol, bgs., c.l., t.l., works, frt equald lb .21 —
bgs., l.c.l., same basis lb 22½- .29
Pentachlorophenol in dms lc higher.
Pentaerythritol, tech., bgs., c.l., dlvd lb .31 - —
bgs., l.c.l., dlvd lb. .32 - —
Pentaerythritol, di-and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust. tanks, Tex. refy. gal. .14 - —
Pentobarbital, dms., 100 lbs or more lb 3.00 —
Pepper, black, Malabar, bgs lb .24¾- —
Lampong, bgs. lb .24½ —
Red, Funtuas, bgs lb .30 - —
Japanese, Hontaka, bgs lb .30 - —
Santaka, bgs. lb .30 - —
Sudanese, bgs. lb .36 - —
White, Muntok, bgs lb .45 - —
Peppermint leaves, dom. USP bls., dms lb .70 .75
Imp. USP, bls lb 85 —
Peppermint oil, nat., dms. lb. 3.15 4.00
Redist., USP, dms. lb 3.60 3.90
Perchloroethylene dms., c.l. or t.l., dlvd lb .13½- —
dms., l.c.l., dlvd lb. .15¼- —
tanks, dlvd. lb. .11¾- —
tanktruck, 1,000 gal. min. dlvd. lb. .12¼- —
Peri acid, dry, bbls. frt. alld lb 1.60 - —
Paste, bbls., frt. alld lb 1.55 - —
Peru balsam, dms. lb. 1.25 - 1.80
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American cns., dms lb. 2.45 3.20
Petrolatum, cream, dms. c.l., refy. lb. .08125- —
dms., l.c.l., dlvd. lb. .10125- .11375
tanks, refy lb .05875- —
Extra amber, dms., c.l., refy. lb. .07125- —
dms., l.c.l., dlvd. lb 09125- 10375
tanks, refy lb 04875- —
Lily white, dms., c.l., refy lb .08625 —
dms., l.c.l., dlvd. lb 10625 12
tanks, refy lb .06735- —
USP, snow white dms. c.l., refy lb .09125- —
dms. l.c.l. dlvd. lb .11125 125
tanks, refy lb 06875 —
USP, soft yellow dms. c.l., refy lb .07125- —
dms., l.c.l., dlvd lb 095 10375
tanks, refy. lb. .04875- —
Petroleum pitch (see Asphalt, petroleum)

PETROLEUM PRODUCTS

Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret dms. c.l., works lb. .16½- .18¾
non-ret. dms. l.c.l. works lb. .17½- .19
tanks, works lb. .14½- .17
50-55%, sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms. l.c.l. works lb. .17 - —
tanks, works lb. .13 - —

HYDROGEN PEROXIDE'S WAYWARD ATOM...AND NAPOLEON

Hydrogen peroxide—one of Columbia-Southern's many products—has an oxygen atom that is constantly attempting to break away from its companions in the hydrogen peroxide molecule. Modern chemistry harnesses this restless atom and puts it to work as a bleach, to whiten cotton and wool, for better dyeing and coloring, and to whiten wood pulp, for better grades of paper.

And it all began with a disgusted emperor . . .

Napoleon's award of 3000 francs for significant scientific research had just been won by an Englishman—at a time when France was at war with England!

Additional funds for equipment to catch up with the British advances were quickly authorized. Using these expanded facilities, the French chemist Thenard discovered his "oxygenated water"—our hydrogen peroxide.

So thanks in part to the Little Corporal we enjoy white or brightly colored wool and cotton fabrics, and excellent grades of white paper. Columbia-Southern produces an extremely pure hydrogen peroxide for bleaching operations. In addition, Columbia-Southern is a major supplier of chlorine, caustic soda, and related products, used by practically every manufacturing and processing industry.

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A Subsidiary of Pittsburgh Plate Glass Company • One Gateway Center, Pittsburgh 22, Pennsylvania

Anhydrous Ammonia, Barium Chemicals, Benzene Hexachloride, Calcium Chloride, Calcium Hypochlorite (Pittchlor®, Pittabs®), Carbon Tetrachloride, Caustic Potash, Caustic Soda, Chlorine, Chlorinated Benzenes, Chloro-IPC, Chrome Chemicals, Hydrogen Peroxide, Muriatic Acid, Pacific Crystals, Perchlorethylene, Rubber Pigments (Calcene®, Hi-Sil®, Silene®), Soda Ash, Sodium Bicarbonate, Sodium Sulfate, Titanium Tetrachloride, Trichlorethylene

o-Phenetidine, dms. c.l., frt. alld. E lb. .91 - —
dms., l.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms., same basis lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lb. lots lb 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%) non-ret dms. frt. alld. E of Rockies lb. .16¾- —
non-ret. dms. t.c.l. same basis. lb. .17¾- —
tanks, same basis lb. .14¾- —
82-84% (cresol 16-18%) non-ret, dms., c.l., same basis lb. .16½- —
non ret. dms., l.c.l., same basis. lb. .17½- —
tanks, same basis lb. .14½- —
Phenol, 30°C. or above, tar distilled, non-ret. dms., c.l., same basis. lb. .18 - —
non-ret dms., l.c.l., same basis. lb. .19 - —
tanks, same basis lb. .16 - —
USP, syn., dms., c.l., t.l., frt. alld lb. .18½- —
dms., same basis lb. .20½- —
tanks, same basis lb. .16½- —
Phenolphthalein, USP or yellow, 250-lb dm. 2,000 lbs. frt. alld. lb. 1.30 - —
250-lb. dm., same basis lb. 1.35 - —
Phenothiazine drench fib dms. t.l., dlvd lb. .44 - —
fib. dms., t.t.l., same basis lb. .47 - —
Phenothiazine drench, NF, fib. dms., t.l., same basis lb. .43 - —
fib dms. t.t.l. same basis lb. .46 - —
Phenyl acetate, dms. 100-lb. lots, works lb .50 - —
Phenyl salicylate (see Salol)
Phenylacetaldehyde, soln., 50%, bots lb. 2.95 —
100%, bots. lb 4.00 4.65
Phenylacetic acid, pure, cryst. cns. lb. 1.25 1.75
dl-Phenylalanine, dms. works lb. 27.00 37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib dms 200-lb lots dlvd E. lb. 3.45 - —
fib. dms., smaller lots, dlvd E lb. 3.80 - —
N-Phenyldiethanolamine dms., c.l., dlvd E lb. .41 —
dms., t.c.l., dlvd. E lb. .42½- —
tanks, dlvd. E lb. .38½- —
m-Phenylenediamine, dms. frt alld. lb. 1.10 - —
o-Phenylenediamine comi., 100 to 1,000 lbs., fib. dms., works lb. 1.70 1.80
p-Phenylenediamine, refd., dms., works lb. 1.42 - —
Tech., dms., works lb. 1.40 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms. t.c.l., same basis lb. .77 —
Phenylethyl acetate bots. lb. 1.30 1.60
2-Phenylethyl alcohol extra, dms. lb. 1.14 1.50
Standard, dms. lb 1.10 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more frt alld lb. 1.50 —
dms. smaller lots, frt. alld lb. 1.70 1.85
Phenylethylphenyl acetate, bots. lb. 4.00 4.25
Phenylglyconic acid (see Mendelic acid)
Phenylhydrazine, 97% 450-lb dms. lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd. E lb. 1.80 - —
fib, dms. smaller lots, dlvd. E lb. 2.10 - —
o-Phenylphenol dms., t.c.l., works. lb. .48 .50
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., l.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¾ .26
nubs, bgs. lb. .33¼ .37
seeds, bgs. lb. .20 Nom.
sorts, bgs. lb. .22¾ .25
Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
CP, bots., works lb. 17.75 - —
Tech. fib dms., works lb. 10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works lb. .15½- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports New Orleans ton. 48.00 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk c.l. mines. long-ton 5.16 - —
55-70%, b.p.l., bulk, c.l., same basis long-ton. 5.56 - —
70-72%, b.p.l., bulk, c.l., same basis long-ton 6.21 - —
74-75%, b.p.l., bulk, c.l., same basis long-ton. 7.21 - —
76-77% b.p.l., c.l. bulk. same basis long-ton 8.21 - —
Above Florida prices are based on fuel oil at $2.37 per bbl. and labor at $1.52.
Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., t.c.l., same basis. 100 lbs. 7.25 - 7.75
tanks, t.w., works 100 lbs. 5.60 - —
80%, cbys., c.l., frt. equald 100 lbs. 7.85 - —
cbys., t.c.l., works 100 lbs. 8.10 - 9.35
tanks, t.w., works 100 lbs. 6.00 - —
NF, 85%, cbys., c.l., works 100 lbs. 8.50 - —
cbys., t.c.l., works 100 lbs. 8.75 - 9.00
tanks, t.w., works 100 lbs. 6.65 - —
Phosphorus, amorph., red, dms., t.l., works lb. .55 - —
dms., smaller lots, works lb. .56 - .57
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20¼
dms., t.c.l., works, frt. equald lb. .21½- —
tanks, works, frt. equald lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., t.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½- —
dms., t.c.l., works lb. .14½- .15¼
Solid, dms., c.l., works lb. .11½- —
dms., t.c.l., works lb. .12½ 13¼
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms., t.c.l., works lb. .1475- .1675
Phosphorus sesquisulfide, dms., cs., c.l., works lb. .38 - —
dms., t.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., t.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .17 - .19
bgs., t.c.l., same basis lb. .18 - .20
tanks, same basis lb. .16½ .18½
Phthalimide, 97-98%, dms., frt. alld lb. .65 - —

Phthalocyanine blue, full strength, bbls dlvd. E. of Rockies	lb	2.90	—
Resinated, bbls., same basis	lb	2.75	—
Water dispersable, bbls., same basis	lb	1.52	—
Phthalocyanine blue prices 1c. higher W. of Rockies.			
Phthalocyanine green toner, bbls., works	lb	3.35	—
Resinated, bbls	lb	3.00	—
Water dispersable, bbls	lb	1.71	—
Phthalocyanine green prices 1c. higher W. of Rockies			
Phthalylsulfacetamide, fib. dms., 1,000-lb lots or more	lb	5.00	—
NF, fib. dms	lb	5.20	—
a-Picoline dms. c.l., works, frt. equald	lb.	43	.43½
dms., t.c.l., works, frt. equald	lb.	44	—
tanks, same basis	lb.	415	.422
b-Picoline 98% dms. t.l., works	lb	1.05	—
dms., t.c.l., same basis	lb.	1.15	—
tanks, same basis	lb.	95	—
b,g-Picoline 5°C dms. c.l., works	lb.	.32½	—
dms. t.c.l. works	lb	33	—
g-Picoline, dms., f.o.b., works	lb.	1.60	—
tanks, t.l. same basis	lb.	1.50	—
Picric acid, NF bbls	lb	85	—
Tech bbls	lb	44	—
Pigment green B kgs	lb	1.45	—
Pilocarpine hydrochloride, USP, bots	oz	5.25	—
Pilocarpine nitrate USP bots. vials	oz.	5.15	—
Pimento, Jamaican, bgs	lb.	.68	—
Mexican, bgs	lb	.57	—
Pimento berry oil, NF dms.	lb	3.75	9.25
Pimento leaf oil, crude, cns	lb.	2.10	2.48
Pine oil, dest.-dist. dms., t.c.l. works	lb.	.15	—
dms. t.c.l ex whse New York.	lb.	.173	—
Steam-dist., dms., ex whse., New York.	lb.	.185	—
dms. dlvd.	lb.	.188	—
Pineneedle oil, Siberian (see Abies Siberica oil)			
Pinetar oil comi. dms., c.l., works.	lb.	.0561-	—
dms., t.c.l., works	lb.	.0634-	—
dms., c.l. ex whse New York.	lb.	.0745-	—
tanks works	lb	.046	—
NF, rectified, dms., incl., t.c.l., works, South	lb.	.40	—
dms. t.c.l ex whse New York	lb.	.41½-	—
Refd., dms., incl., t.c.l. works	lb.	.35	—
dms. incl t.c.l., ex whse New York	lb.	.36½-	—
Pink root, bls.	lb.	1.75	—
Piperazine anhyd., dms. t.l., frt. alld	lb.	1.80	—
dms., t.c.l., same basis	lb.	1.85	—
Piperazine citrate 36% dms., 1,000 lbs. or more frt alld	lb.	1.15	—
Piperazine dihydrochloride 51%, dms. 1,000 lbs or more frt. alld	lb.	1.23	—
Piperazine hexahydrate 44%, dms., 1,000 lbs. or more, frt. alld	lb.	.86	—
dms., 200-800 lbs., frt. alld	lb.	.89	—
Piperazine phosphate 42% dms., 1,000 lbs. or more frt. alld.	lb.	1.06	—
Piperidine dist. 98% min., dms., frt. equald	lb.	2.60	—
Piperonyl butoxide dms. dlvd E.	lb	4.50	5.05

PITCHES

Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).			
Platinum metal, works	oz.	76.00	80.00
Pleurisy root bls.	lb	45	.50
Podophyllum resin, NF, dms.	lb.	15.60	—
Poke root, bls	lb.	.19	.22
Polymyxin, bulk, bots., 50 billion units or more		1,000,000 units.	.52 — —
bulk, bots., 25-50 billion units.		1,000,000 units.	.54 — —
bulk, bots., 1-25-billion units.		1,000,000 units.	.56 — —
Polyoxyethylene sorbitan monostearate, dms 20,000-lb. lots, works	lb.	.42	—
dms., 10,000-20,000-lb lots, works.	lb.	.44	—
dms., smaller lots, works	lb.	.47	.49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb lots, works.	lb.	.42	—
dms., 10,000-20,000-lb. lots, works	lb.	.44	—
dms., smaller lots, works	lb.	.47	.49
Pontianak copal gum, chips bgs	lb.	.26	—
Nubs bgs	lb.	.37	.40
Poppy seed Argentine, bgs.	lb.	No stocks.	
Dutch, bgs.	lb.	.22	—
Danish, bgs.	lb.	.20½-	—
Polish, bgs.	lb.	.20	—
Turkish, bgs.	lb.	.17½-	—
Potash caustic, liq., 45% basis, dms., c.l., works 100 lbs.		4.25	—
dms., t.c.l., same basis 100 lbs.		5.05	—
tanks, same basis 100 lbs.		3.70	—
flake, 88-92%, dms., c.l., same basis 100 lbs.		9.15	—
dms., t.c.l., same basis. 100 lbs.		10.20	—
Potash, solid, 88-92%, dms., c.l., works 100 lbs.		8.70	—
dms. t.c.l. works 100 lbs		9.75	—
Potassium acetate, NF 200-lb. dm., f.o.b works E	lb.	.31	—
Potassium bicarbonate, USP, gran. dms	lb.	.22	—
USP, powd., dms.	lb.	.24	—
Potassium bichromate, gran., bgs., c.l., t.l., works	lb.	.18	—
bgs., t.c.l., works	lb.	.18½-	.19¼
Potassium bichromate in dms. ¾c. higher.			
Potassium bitartrate, 100-lb. bgs., c.l., frt. equald	lb.	.37	—
100-lb. bgs., 5,000 lbs. 1 shipt., same basis	lb.	.38	—
100-lb. bgs., smaller lots, same basis	lb.	.40	—
Potassium borohydride, powd., dms., works	lb.	16.00	22.00
Pelletized postassium borohydride $1.25 per lb. higher in 1,000-lb. lots.			
Potassium bromate, dms., 1,000-lb. lots or more, works	lb.	.50	—
dms., smaller lots, works	lb.	.52	.62
Potassium bromide, USP, gran., bbls., kgs	lb.	.39	.40
Potassium carbonate, dom., NF, gran., bbls. dms	lb.	.20	—
Potassium carbonate, dom., tech., powd., bbls., dms	lb.	.21	.22
calcined, bgs., c.l., works, 100 lbs.		8.50	—
bgs., t.c.l., same basis 100 lbs.		9.55	—
Potassium carbonate, hydrated, 83-85%, bgs., c.l., works. 100 lbs.		7.10	—
bgs., t.c.l., works....100 lbs.		8.15	—
Potassium chlorate, cryst., dms., c.l., works	lb.	.12¼-	—
dms., t.c.l., works	lb.	.13½-	.14½
Powd., dms., c.l., works	lb.	.12¾-	—
dms., t.c.l., works	lb.	.14 -	.15
	works lb.	.12¼-	—
Potassium chlorate, NF cryst., dms., 2,000 lbs or more works.	lb.	.16¾-	—
NF, gran. 25-lb metal dms	lb.	.36	—
NF powd. dms., 2,000 lbs or more works	lb.	17¼-	—
Potassium chloride indust., 99.9% KCL, bulk, c.l works	ton	29 00	—
bgs. c.l. works	ton	33 50	—
99.3% KCL bulk, c.l. works	ton	27 00	—
bgs. c.l works	ton	31 50	—
Potassium chloride, USP, cryst., dms	lb.	.20 -	.22
USP, gran., dms	lb	.21 -	.23
USP, powd., dms.	lb.	.24 -	.26
Potassium chloride, agricultural (see Potassium muriate)			
Potassium chromate tech., dms., works	lb.	.50 -	.51
Potassium citrate, NF, gran., 250-lb. dm., f.o.b. works E	lb.	.43 -	—
powd., 250-lb dms. same basis.	lb.	.46 -	—
Potassium cyanide, dms 20,000-lb. lots or more, works	lb.	.42½-	—
dms. 2,000-19,999-lb lots, works.	lb.	.43 -	—
dms. smaller lots, works	lb	.44 -	.44½
Potassium dichromate (see Potassium bichromate)			
Potassium ferricyanide, dms., ton lots, works	lb.	.50 -	—
dms., smaller lots works	lb.	.65 -	—
Potassium ferrocyanide, dms., ton lots	lb.	24½-	—
dms., smaller lots	lb.	.29 -	—
Potassium fluoborate fib dms., c.l., works	lb.	.30 -	—
fib. dms., t.c.l., works	lb.	.31 -	—
Potassium fluoride, dms. works	lb	.37 -	.38
Potassium gluconate, 100-lb. dm., f.o.b works E	lb	1.67 -	—
Potassium guaiacol sulfonate, NF, dms	lb	2.10	2.30
Potassium hydroxide tech (see Potash caustic)			
Potassium hydroxide, USP, pellets, 100-lb dms. 1 to 100-dm. lots	lb.	.33½-	.38
Potassium hypophosphite, NF fib. dms. 1,000-lb lots	lb	1.38 -	—
Potassium iodide USP cryst. gran., or powd., 250-lb dm., f.o.b. works	lb.	1.40 -	—
Potassium manure salt, 22% K2O, bulk, c.l. works unit-ton		.17 -	.1765
Potassium metabisulfite, gran. dms.	lb.	.16 -	—
Powd., dms.	lb.	.27 -	—
Potassium muriate, standard, bulk, c.l., works unit-ton.		.31 -	.33
bagged, 60% minimum K2O, same basis	ton.	23.50	-24.60
Gran., bulk, c.l., works unit-ton		.31½-	.33½
bagged, 60% minimum K2O, same basis	ton.	23.80	-25.00
Inside prices apply to material contracted for prior to July 1, 1959.			
Outside prices apply to material contracted for after that date but also for delivery during the current month.			
Potassium nitrate, NF, cryst., bbls., 20-ton lots	100 lbs	17.00	—
bbls. smaller lots	100 lbs	18.00	19.00
NF, gran. bgs. 20-ton lots	100 lbs	9.50	—
bgs. smaller lots	100 lbs	11.00	12.00
NF, powd. bgs. 20-ton lots	100 lbs.	10.50	—
bgs. smaller lots	100 lbs	12.00	13.00
Potassium oxalate neutral, tech. fine gran. powd 300-lb dm., f.o.b works E	lb	.32	—
Potassium pentaborate gran. dms. c.l. works	ton	219 50	—
dms. ton lots, ex whse	ton	311 00	—
dms. smaller lots ex whse	ton	316 00	—
Powdered potassium pentaborate $10 per ton higher			
Potassium perchlorate, dms., c.l., works	lb	18½	—
dms., t.c.l., works	lb	19	.20
Potassium permanganate, comi. kgs., works	lb.	25	.33
USP, dms., works	lb.	29	.35
Potassium persulfate, dms., c.l., works	lb.	17½	—
dms. t.c.l., works	lb	.18	.21
Potassium pyrophosphate, tetrabasic, dms., works	lb	15½	.18½
Potassium prussiate red (see Potassium ferrocyanide)			
Potassium prussiate yellow (see Potassium ferro-cyanide).			

CAUSTIC POTASH

For all industrial uses

MINERALS International CHEMICALS

LIQUID — Iron-free, a clear water-white solution of 45-50%. In tank cars and in returnable and nonreturnable 675-lb. drums.

LIQUID — Special low-chloride, iron-free grade — 45-50%. In tank cars and in returnable and nonreturnable 675-lb. drums.

SOLID — 90%. In 700-lb. drums.

FLAKE — 90%. In 100-, 200- and 400-lb. drums.

GRANULAR (BROKEN) — 90%. In 100-, 210- and 425-lb. drums.

AMERICAN SELECTED WALNUT — In 100-, 210- and 425-lb. drums.

PROMPT SERVICE

Through sales offices in principal cities ... distributors from coast to coast

MINERALS International CHEMICALS

MAGNESIUM OXIDE 99.0+%

Pellets — Granular — Powdered

LOW IRON ... LOW BORON ... LOW LIME ... LOW IGNITION LOSS — Consistently uniform in size and quality. Bulk, 80-lb. bags, 100-lb. drums, carloads or by truck for L.C.L. lots, F.O.B. Plant, Carlsbad, New Mexico.

PROMPT SERVICE

Through sales offices in principal cities ... distributors from coast to coast

MINERALS International CHEMICALS

CARBONATE OF POTASH

— for the production of quality glass, chemicals, textiles, pharmaceuticals and other products

LIQUID — 47 to 48%. In 675-lb. drums and tank cars.

HYDRATED — 83 to 85%. In 100-lb. bags and 400-lb. barrels for shipment by truck or rail.

CALCINED — 99 to 100%. In 100-lb. bags and 325-lb. barrels and bulk in minimum carloads.

PROMPT SERVICE

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MINERALS International CHEMICALS

MURIATIC ACID — 20° and 22° Baumé Water White and Commercial Grades Bulk in Tank Cars and Tank Trucks.

POTASSIUM CHLORIDE — Refined 99.95% and Technical 95% KCl.

SULPHATE OF POTASH — 95% K_2SO_4

LIQUID CHLORINE — Bulk in Tank Cars

HYDROFLUOSILICIC ACID — For Water Fluoridation.

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Potassium Silicate—Sage Oil

Potassium silicate, electrical grade, 30° Be. 1:2.0, dms., c.l., works 100 lbs 6.50 - —
dms. l.c.l. 5 dm lots or more, works 100 lbs 7.25 7.65
tanks, works 100 lbs 6.15 - —
40.5° Be 1:2.1 dms. c.l. works 100 lbs 5.95 - —
dms. l.c.l. 5 dm lots or more works 100 lbs 6.70 - —
tanks, works 100 lbs 5.60 - —
Potassium silicate glass grade, bgs. c.l., works 100 lbs 17.30 - 18.15
bgs. l.c.l. works 100 lbs 17.80 - —
Potassium silicate soln., 29° Be. 1:2.5. dms. c.l. works 100 lbs 4.95 - —
dms. l.c.l., 5-dm lots or more works 100 lbs 5.70 - —
tanks, works 100 lbs 4.60 - —
Potassium silicofluoride, bgs., works lb .09½ - .10

Potassium silicofluoride in drums, 0.4c per lb higher.

Potassium stannate dms. frt. alld. E lb. .784 - .857
Potassium sulfate, agricultural bulk, c.l., works unit-ton .64½ - .66½

Inside price applies to tonnage contracted for prior to July 1, 1959.

Outside price applies to tonnage contracted for after that date but also for delivery during the current month.

Potassium sulfate, NF VII, cryst., dms, works lb. .31 - .33
NF VII, gran., dms lb. .18½ - —
NF VII, powd., dms lb. .16 - .17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate)
Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works lb. .77 - .79
Potassium titanate, ctns., c.l., works. lb. .16¼ - —
ctns., 5-ton lots, works lb. .16½ - —
ctns., 1-ton lots or less, works lb. .16¾ - —
Potassium-magnesium sulfate, basis 40%K_2SO_4 and 18% MgO, bulk, works, base price ton. 13.45 - —
bulk, works, July forward ton. 14.00 - —
Potassium-sodium tartrate, NF gran. or powd., 250-lb dms., c.l., f.o.b. works E lb. .42½ - —
250-lb. dms., 5,000-lb. lots, same basis lb. .43 - —
250-lb. dms., same basis lb. .43½ - —
Potassium-titanium fluoride, fib. dms., works lb. .39 .40
Potassium-zirconium fluoride, fib. dms., c.l., works lb .50 —
fib dms., l.c.l., works lb .52½ .55
Pregnenolone, bots gram No prices
Pregnenolone acetate, bots. gram No prices
Procaine hydrochloride USP, dms., 1,000-lb lots, frt. alld lb 2.60 —
dms 100-500 lb lots lb 2.95 3.15
Progesterone USP, bots gram No prices
Progesterone acetate, bots. gram No prices.

Propenyl guaethol, dms. lb. 24.50 - 27.00
Propionic acid, syn., pure, dms., c.l., works lb. .23¼ - —
dms., l.c.l., works lb. .24½ - —
tanks, works lb. .20¾ - —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾ - —
dms., l.c.l., dlvd. lb. .16¼ - —
tanks, dlvd. lb. .12¼ - —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 - —
dms., l.c.l., dlvd. lb. .15½ - —
tanks, dlvd. lb. .11½ - —
n-Propyl gallate, dms., 100 to 2,000-lb lots, works lb. 3.90 - 4.40
n-Propyl-p-hydroxybenzoate USP, dms lb 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo. 55.00 - —
bots., smaller lots kilo. 55.10 - 55.30
n-Propylamine, dms., c.l., dlvd lb 1.24 - —
dms., l.c.l., same basis lb. 1.255 - —
Propylene dichloride, consumers' dms. c.l., dlvd. E lb. .0845 - —
dms., l.c.l., same basis lb. .0995 - —
tanks, same basis lb. .07 - —

Propylene dichloride prices in West 1c. higher, same basis.

Propylene glycol, indust., dms., c.l., dlvd E lb. .16 - —
dms., l.c.l., same basis lb. .17½ - —
tanks, same basis lb. .13½ - —
USP, dms., c.l. dlvd. E lb. .18 - —
dms., l.c.l., same basis lb. .19½ - —
tanks, same basis lb. .15½ - —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½ - —

Propylene oxide, dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., dlvd. E lb. .19¼ - —
tanks, dlvd. E lb. .15½ - —
Psyllium seed, black, bgs. lb. .32 .34
Blonde bgs. lb. .18 - .20
Husks, bgs. lb. .40 - —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03⅝ - .04¼
bgs., smaller lots lb. .03⅞ - —
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½ - —
fine, bgs. ton lots lb .04 - —
sun dried, coarse, bgs. ton. 60.00 - —
fine, bgs ton. 60.00 - 70.00
Pumpkin seed, bgs. lb. .25 - .26
Pyrethrins, syn (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bags, ton, works lb. .71 - —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 9.60 - 9.80
100/1 basis (10 grams pyrethrins per 100cc odorless base) dms., works gal. 45.90 - 46.90
Pyrethrum oleoresin, dewaxed, 20% dms., works lb. 11.00 - 11.35
purif., 20%, dms., works lb. 11.00 - 11.35
Pyridine, denat., dms c.l. works and frt equald gal 2.77 —
dms l.c.l. same basis gal 2.80 - —
Refd., 2°, non-ret., dms., l.c.l., same basis lb .70 - —
tanks, same basis lb. .65 - —
Pyridoxine hydrochloride USP, 500-gram bots., dms., f.o.b. works. kilo. 175.00 - —
Pyrites, Canadian, 48-50% S, mines, long-ton 5.00 6.00
Pyrocatechol (see Catechol)
Pyrogallic acid NF (see Pyrogallol)
Pyrogallic acid, tech., bbls lb 3.17 3.25
Pyrogallol, NF, 100 lb dms. lb 3.50 —
Pyroxylin, USP bots. lb 9.50 - —

Q

Quassia chips lb. .10 - —
Quercetin, fib dms kilo lots kilo 26.40 - —
Quicksilver (see Mercury, metal)
Quince seed, bgs lb. 1.15 1.50
Quinidine sulfate, USP, cns oz. .74½ - .77
Quinine, NF, cns. 100-oz lots oz. .34 Nom.
Quinine bisulfate, USP cns oz. .27½ .29
Quinine hydrochloride, cns. oz. .23 .25
Quinine sulfate, USP, cns oz. .24½ - .26
Quinoline, dms., c.l., frt equald lb .50¾ —
dms., l.c.l., same basis lb .51¼ —
tanks, same basis lb. .50 - —

R

R salt, paste, dms frt. alld., 100% basis lb. .88 - —
Powd frt. alld 100% basis lb. .98 - —
Rapeseed oil, dms. lb. .15 - .15¼
tanks lb. .13 - —
Rare earth oxalate, 45-50%, bgs., works lb 1.00 - —
Rauwolfia serpentina root, powd., bbls, dms lb. 1.00 - 1.20
Red carmine No. 40 (see Carmine).
Red oil (see Oleic acid)

RED PIGMENTS
Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red)
Reserpine, cryst., bots gram 1.25 - —
Resorcinol, tech grade, dms., c.l., works, frt. equald lb. .77½ - —
dms., l.c.l., same basis lb .78½ - —
USP, powd., dms., works lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs. lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs lb. 6.00 - —
Tungstated, PTMA, works, kgs lb 6.60 —
Rhodinol, 5-lb. cans lb. 42.00 - 51.00
Synthetic lb. 14.00 - 16.00
Rhubarb root, india whole, bgs lb. .25 - —
powd., bgs. lb. .35 - —
Riboflavin, USP, fib. dms., kilo or more dlvd kilo. 36.00 - —
Riboflavin, USP, readily soluble, bots., dlvd kilo. 130.00 - —
Riboflavin, 5-phosphate-sodium fib. dms., kilo or more dlvd. kilo. 104.50 - —
Rice bran oil, clarified, dms. l.c.l. lb. .15½ - —
tanks, dlvd. E lb. .13 - —
Ricinoleic acid (see Castor oil acids split)
Rochelle salt (see Potassium sodium tartrate).
Roofing pitch (see Coaltar pitch roofing)
Rose oil, nat., Bulgarian bots oz 72.00 —
Turkish, bots. oz. 55.00 - 58.00
Rosemary oil, Spanish, NF, cns., dms lb .97 1.20
tech., cns. dms lb .50 1.20
Rosin, gum and wood (see Naval Stores in Protective Coatings market)
Rotenone, fib. dms., works, unit-lb. .12 - —
Resin, 25-45% fib dms. works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾ - —
bgs., ton lots same basis lb. .04¼ - —
Rubber solvent, petroleum, tanks, Calif. ex tax, San Francisco gal. .178 - —
tanks, east coast, N. J., N. Y. gal. .19 - —
tanks, group 3 gal. .13875 - —
Rue oil, bots. lb. 2.75 3.00
Rutin, NF, fib. dms., 10 kilo lots kilo. 13.75 - —
fib. dms., 5 kilo lots kilo. 14.00 - —
fib. dms., 1 kilo kilo. 14.50 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib. dms., 1,000-lb. lots, works lb. 2.50 - —
USP, gran., soluble, dms., 1,000-lb lots lb. 1.60 - —
dms., smaller lots lb. 1.70 - 1.80
USP, powd., soluble, insoluble, dms., 1,000-lb lots lb. 1.65 —
dms., smaller lots lb. 1.75 1.95
Safflower oil, dms., New York lb. .1785 - .1830
tanks, Atl. Coast lb. .1585 - —
Saffron, Mancha Superior, tins lb. 25.00 - —
Safrol, dms. lb. .70 - —
Sage, Dalmatian, bgs. lb. .40 - —
Greek, cns. lb .16 —
Italian, cns. lb .18 —
Sage oil, clary, bots. lb. 25.00 - 32.00
Dalmatian, cns. lb. 3.25 - 3.60
Spanish, cns. lb. 1.35 - 1.75

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The ethylene oxide survey is concerned with the many reactions of ethylene oxide with alcohols, acids, amines, amides, etc., which lead to surface active agents, especially of the non-ionic type. Included are investigations on the solubilizing effect attained by the addition of ethylene oxide; end product uses with emphasis on detergent compositions; and techniques whereby non-ionics are converted to ionics through sulfation and other reactions. The propylene oxide survey summarizes investigations undertaken on the reaction of propylene oxide with many different classes of organic compounds. The application section is based not only on the direct use of propylene oxide but also on the use of propylene oxide adducts. Information on toxicity is provided. Both surveys contain author-patentee and numerical patent indices.

Jefferson can provide high quality ethylene and propylene oxides in any quantities you desire. For samples of these reactive intermediates or your copies of the comprehensive patent and literature surveys, write on your company letterhead to Jefferson Chemical Company, Inc., 1121 Walker Avenue, P. O. Box 303, Houston 1, Texas.

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Morpholine • N-Alkyl Morpholines • Piperazine • Piperazine Salts
Nonyl Phenol • Ethylene and Propylene Carbonates • Caustic Soda

Essential Chemicals From Hydrocarbon Sources

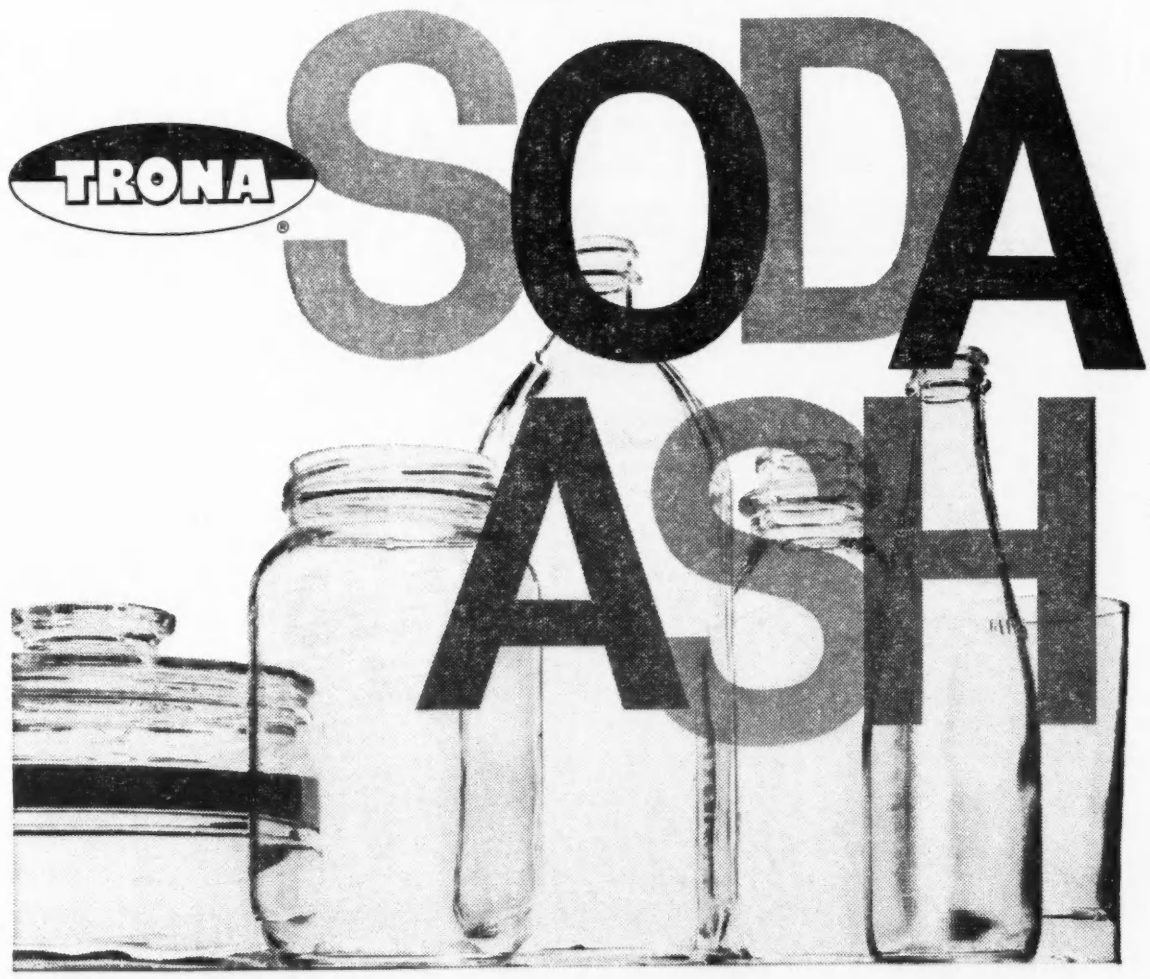
178

Sal Soda
Salicylaldehyde, dms., c.l., f.o.b. plant, frt. equald lb 1.23 - —
dms. t.c.l. same basis lb. 1.25 - —
Salicylamide, 100-lb dms lb 1.05 - —
Salicylic acid crude, 6b. dms., c.l., t.l., frt alld lb. .37½- —
fib dms. t.c.l., frt. alld. on 100 lbs. or more lb. .38½- —
Sublimed tech. fib. dms., c.l., t.l. dlvd lb. .39¼- —
fib dms., t.c.l. dlvd lb. .43½- —
USP cryst. 200-lb nb dms., 1,000-lbs or more lb. .50½- —
200-lb fib dms., less than 1,000 lbs lb. .53½- —
100-lb fib dms., 1,000-lbs or more fb. .52½- —
100-lb fib dms., less than 1,000 lbs fb 55½- —
USP, powd., 100-lb fib. dms., 1,000-lbs or more lb. .57½- —
100-lb nb dms. less than 1,000 lbs fb .60½- —
Salol, NF gran., bbls. kgs lb. 1.20 - —
Powdered salol 25c per lb higher
Salt, rock, paper bgs., c.l. 100 lbs 1.09 - —
Salt, table vacuum, common, fine, paper bgs. c.l 100 lbs 1.34 - —
Saltcake, dom. bulk, works, 100% Na2SO4 basis ton 28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood E Indian chips, bgs lb .65 - .66
powd. fib dms lb .75 - .76
Sandalwood oil, cns. lb. 14.75 -16.50
Sarcosine tech. tanks, f.o.b., works, frt equald lb 1.03 —
Sardine oil crude tanks Pac coast lb No stocks
Sassafras oil artif. dms. lb 40 78
Nat., dom., dms lb. 1.45 - 2.15
Savin oil, USP cns lb 4.50 5.25
Savory oil cns lb 4.75 —
Schaeffer's salt, paste, dms frt alld. 100% basis lb. .85 - —
Powd. bgs., frt. alld 100% basis. lb. .93 - —
Scopolamine hydrobromide, USP, bots oz. 13.00 - —
Sebacic acid CP bgs. c.l., works. lb .69½- —
bgs., t.c.l. works lb. .71½- —
Purified, bgs., c.l., works lb. .65½- —
bgs., t.c.l. works lb. .67½- —
Seidlitz mixture fib dms. 5,000-lb. lots lb. .30½- —
fit dms. smaller lots lb. .31 - .32
Selenium powd. 99½% dms. dlvd lb 7.00 —
Senega root, bls. lb. 3.00 - 3.25
Senna leaves Alexandria, whole and half, bls lb. .22 - —
siftings lb .18 - —
Tinnevelly No 1, bls lb .22 - —
No. 2, bls. lb. .18 - —
No 3 bls lb .14 - —
pods, bls lb .28 - —
powd bbls. bxs. lb 17 - —
Serpentaria root, bls. lb. 4.50 - 5.00
Sesame oil USP dms. lb .38 .39
Sesame seed Columbian bgs. lb .15 - —
Lebanese hulled bgs lb .19 - —
Nicaraguan, hulled, bgs lb. .21½- —
nat., bgs. lb. .14 - —
Salvadorian, nat., bgs lb. .13 - —
Shellac bleached bonedry, bgs., 1,500-lb lots lb. .46 - —
bbls. 1,500-lb lots lb. .47 - —
kgs., 1,500-lb lots lb 48 - —
Bonedry shellac prices for less than 1,500 lb lots 1c per lb higher for all packages
Shellac bleached, refd. bgs., 1,500-lb lots lb. .56 - —
bbls., 1,500-lb lots lb. .57 - —
kgs., 1,500-lb lots lb. .58 - —
Shellac, orange, lemon No 1, bgs., 10-bg. lots lb. .37 - .39
lemon No. 2, bgs., 10-bg. lots. lb. .34 - .37
superfine, bgs., 10-bg. lots lb. .32 .34
Shellac in 1 to 10-bg. lots 1c. per lb more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., t.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., t.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs., t.c.l., works lb. .07 - .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton 25.00 —
bgs. t.c.l., works, ex whse. ton 45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton 20.00 - —
bgs. t.c.l., works ton 25.00 - —
99½%, 140 mesh, bgs., c.l., works ton 15.00 - —
bgs., t.c.l., works ton 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
dms., t.c.l., works lb. .22 - .30½
tanks works lb. .17 —
Silver bullion, ingots, cs Troy oz. .91⅛- —
Silver cyanide bots. 1,000-oz lots, oz. .94¾- —
bots. 500-oz lots oz. .95¼- —
bots. 100-oz lots oz. .96¼- —
Silver nitrate CP, cryst., bots., 3,000-oz lots oz. .67¼- —
dms., 1,000-oz. lots oz. .67¾- —
bots., 250-500-oz lots oz. .68¾- —
USP granular silver nitrate 4c. per oz. higher
Silver proteinate, mild, USP, bots., dms., 1,000-oz lots oz. 1.15 - —
Strong, NF bots. dms. 1,000-oz. lots oz 1.10 —
Snakeroot oil, Canada, cns lb. 40.00 -43.00
Soapbark crushed bls lb. .30 .35
Powd., bls. lb. .35 .40
Whole, bls. lb. .20 .25
Soda ash dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs. t.c.l., stock pts., 100-lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs., t.c.l., stock pts. 100 lbs. 3.95 - 4.72
bulk, c.l. works 100 lbs. 1.55 - —
Soda caustic, flake 76%, dms., c.l., works, frt. equald 100 lbs. 5.20 - —
liq. 50%, sellers' tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 - 3.00
73% sellers tanks, works, dry basis 100 lbs 3.00 —
73%, rayon type, sellers' tanks, works, dry basis 100 lbs. 3.00 - 3.10
solid, 76%, dms., c.l., works. 100 lbs 4.80 - —
Soda sal. conc. bgs. c.l. works, 100 lbs 2.50 - —
bgs. smaller lots, works 100 lbs 2.80 - —
Sodium acetate, anhyd., bgs., c.l., dlvd E lb. .14½- —
NF 60% gran. dms. c.l. works, lb. .15½- —
dms. t.c.l., works lb. .17½- —
Sodium alginate, NF, white powd. dom. 500 lbs or more lb. 1.02 - —
Sodium p-aminosalicylate dms., 100-lb. lots or more frt adjusted lb. 1.90 - —
Sodium antimoniate, bgs., c.l., dlvd. E lb. .25¼- —
bgs., t.c.l., dlvd. E lb. .27 - —
Sodium arsenate 60% arsenic pentoxide, dealers, dms., ton or more, works lb. .26 - —
dms. less than ton lots, works lb. .26½- —
Sodium arsenite, 90% pink powder, 75% arsenious oxide, dealers, dms., ton lots or more works lb. .17½- —
dms., less than ton lots, works lb .18 - .19
Sodium ascorbate, dms. 25-50 kilo dms., f.o.b. works kilo. 10.00 - —
10-kilo dm., same basis kilo. 10.35 - —
5-kilo dm., same basis kilo. 10.75 - —
1-kilo bot., same basis kilo. 11.00 - —
Sodium benzoate tech., dms., c.l., t.l., frt. alld lb .35 - —
dms., t.c.l., same basis lb .39 - —
USP, dms., c.l., t.l. frt. alld lb. .38 - —
dms., ton lots, same basis lb. .43 - —
dms., 1,000-lb lots, same basis. lb .45 - —
Sodium bicarbonate USP, gran. bgs., c.l., works 100 lbs 2.95 - —
bgs., t.c.l., works 100 lbs 3.85 - —
USP, powd. bgs. c.l. works 100 lbs 2.55 - —
bgs., t.c.l. works 100 lbs 3.45 - —
Sodium bichromate, gran., bgs., c.l. t.l., works lb 13 - —
bgs. t.c.l. works lb .13½- .14¾
Sodium bichromate in dms ¾c per lb. higher
Sodium bifluoride bbls. c.l. works, frt equald lb .19½- —
bbls., t.c.l., same basis lb. .2025- —
Sodium bisulfate bulk c.l. works 100 lbs 2.00 —
dms., c.l., frt. equald 100 lbs 3.00 3.60
dms., t.c.l., frt. equald 100 lbs 3.50 4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs 5.00 - —
bgs., t.c.l. works 100 lbs 5.45 - —
Soln., 35° bbls. c.l. works 100 lbs 1.70 - —
bbls., t.c.l., works 100 lbs 2.20 - —
Sodium borate (see Borax)
Sodium borohydride powd dms. t.c.l., works lb. 33.00 -40.00
dms., c.l., works lb. 19.90 - —
Stabilized water soln. 12% $NaBH_4$, 100% basis dms works lb 15.00 - —
Pelletized sodium borohydride $1 per lb higher in 1,000-lb lots.
Sodium bromide USP gran., dms. works lb 40 - —
Sodium carbonate cryst. monohydrated (see Soda ash)
Sodium carbonate monohydrated, bgs., c.l., works 100 lbs 3.10 - —
bgs., t.c.l., works 100 lbs 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l works lb .09 —
dms., t.c.l., works lb 09½- .10½
Sodium chlorate in 100-lb dms. only, ¼c. per lb higher
Sodium chloride, tech (see Salt).
Sodium chloride, USP, gran., bgs lb .03 - —
Sodium chlorite, tech. dms., c.l., works lb .58 - —
dms., 20-dm lots or more works lb .66 - —
dms., smaller lots, works lb .70 - .73
Sodium chloroacetate, tech dms. c.l. works lb .27 - —
dms., t.c.l. works lb .28 —
Sodium chromate anhyd fib dms. c.l. t.l works lb 14¾ —
fib dms. t.c.l., works lb 15¼ 16¼
Sodium chromate, tetrahydrate, bgs. c.l. t.l. works lb 10¼5 —
bgs t.c.l lb 10¼5 11¾0
Sodium citrate anhyd 200-lb dm. f.o.b works E lb. .62 —
NF VIII gran bgs c.l., same basis lb .26 - —
USP XIV gran. bgs. c.l., same basis lb .29 —
Sodium citrate USP powd prices ½c higher.
Sodium cyanate dms 1,000-lb lots, works lb .85 —
dms. smaller lots works lb .90 1.10
Sodium cyanide, flake 96-98% dms. c.l or 20,000-lb lots lb .193 —
dms over 1,000-lb lots lb .203 —
dms 100-lb to 1,000-lb lots lb .213 —
Gran sodium cyanide 1c higher
Sodium cyclamate 100-lb dm., f.o.b. works lb. 1.95 - —
Sodium diacetate anhyd., 39-41% acetic acid 250-lb dms. c.l., works lb .18 —
250-lb dms. t.c.l. works lb 18¾ —
Sodium diacetate, tech., 33-35% acetic acid, dms. t.c.l., works lb .15 —
250-lb. dms. t.c.l., works lb 15¼ —

yours for the specifying...

assured quality

from batch to market with



Quality in glassware is more easily achieved if the raw material source is right. American Potash and Chemical Corporation, as your source of uniformly high quality Soda Ash, has grown with the industry year by year...helping you meet competitive challenges...constantly upgrading quality to fill all your requirements...consistently delivering as you specify. Your product's quality—from batch to market—will be enhanced by the demonstrated production capacity, technical information, and service follow-through that typifies TRONA* service in Soda Ash...*yours for the specifying.*

American Potash & Chemical Corporation

3000 WEST SIXTH STREET, LOS ANGELES 54, CALIFORNIA
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PRODUCERS OF: BORAX • POTASH • SODA ASH • SALT CAKE • LITHIUM • BROMINE
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and other diversified chemicals for Industry and Agriculture

*TRADENAME AND TRADEMARK OF APACO

Sodium Dimethyl Dithiocarbamate—Sodium Thiosulfate

Sodium dimethyl dithiocarbamate 40% soln dms c.l. t.l. frt alld 100% basis	lb	42	—
dms. l.c.l. t.l. same basis	lb	47	52
tanks same basis	lb	38	—
Sodium ferrocyanide bgs 10-ton lots	lb	13½	—
bgs smaller lots	lb	14¾	—
Sodium fluoride white 97% fib dms c.l. works frt equald	lb	1390-	—
fib dms l.c.l. works frt equald	lb	1465-	—
Sodium formate bgs c.l works 100 lbs		7 05	—
bgs l.c.l. ex whse 100 lbs		8 65	—
Sodium gentisate 100 lb fib dms	lb	5 50	—
Sodium gluconate refd 250-lb dm. f.o.b works E	lb	84	—
Tech. bgs. c.l. t.l. same basis	lb	34	—
Sodium hydride 30% soln in oil. dms works	lb	1 25	2.50
25% soln in oil dms 50 lbs or less f.o.b shipping point	lb	2 20	—
dms. 50-99 lbs. same basis	lb	1 77	—
dms. 100 999 lbs same basis	lb	1 20	—
dms. 1,000 lbs or more same basis	lb	95	—
Sodium hydrosulfide (see Sodium sulfhydrate)			
Sodium hydrosulfite dms c.l. frt alld lb		22½	—
dms. l.c.l. frt alld.	lb	24¾	—

Sodium hydroxide NF pellets 100-lb dms 1 to 100 dm lots	lb	23½	28
Sodium hydroxide tech (see Soda caustic)			
Sodium hypophosphite NF dms. 1,000-lb lots	lb	97	—
Sodium hyposulfite (see Sodium thiosulfate)			
Sodium iodide, USP 300-lb dm., f.o.b works	lb	1.98	—
Sodium lauryl sulfate dms. c.l. dlvd	lb	20½	—
dms. l.c.l., dlvd	lb	21½	—
tanks dlvd.	lb	19½	—
Sodium lignin sulfonate bgs. c.l. works 100 lbs		4.25	6.50
l.c.l. bgs works 100 lbs		4 40	7 00
Sodium metabisulfite (see Sodium bisulfite)			
Sodium metaborate octahydrate gran bgs. c.l works ton		102 00	—
bgs., ton lots, ex whse 100 lbs		8.00	—
bgs., smaller lots, ex whse. 100 lbs		9.25	11.25
Sodium metaborate tetrahydrate bgs., c.l works ton		210 00	—
bgs. ton lots ex whse 100 lbs		13.93	—
bgs. smaller lots ex whse 100 lbs		15.18	17.18
Sodium metallic bricks c.l works	lb	.21	—
Fused 18,000-lb lots or more, works	lb	19½	—
tanks, works	lb	.17	—

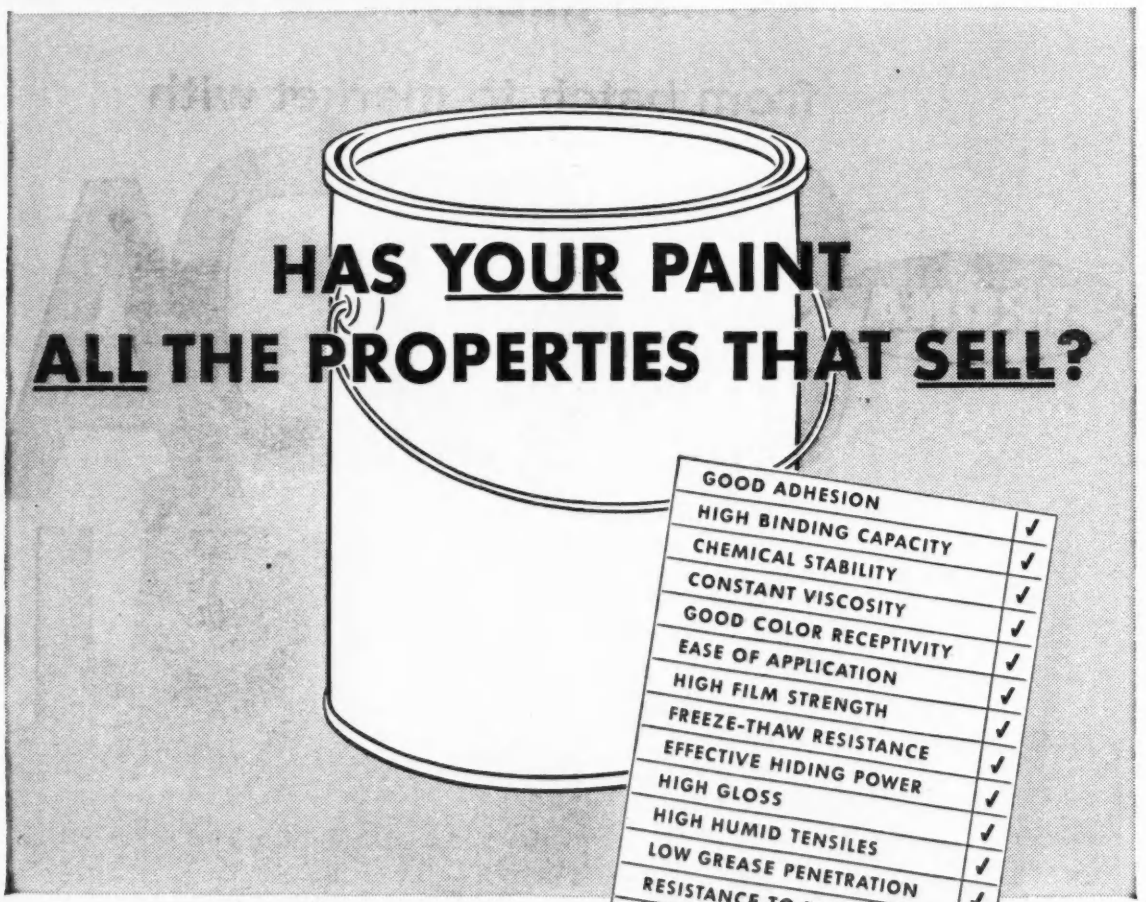
Sodium metalinate bbls. frt alld.	lb	62	—
Sodium metaphosphate, bgs., c.l., f.o.b shipping pt 100 lbs.		11 10	—
bgs., l.c.l., same basis 100 lbs.		11.85	—
dms., c.l., same basis 100 lbs.		11 70	—
dms., l.c.l., same basis 100 lbs.		12.45	—
Sodium metasilicate anhyd., bgs. c.l. works 100 lbs		5 70	—
bgs. 6,000-19,900 lb lots works 100 lbs		6 05	—
dms. c.l., works 100 lbs		6.20	—
dms l.c.l. works 100 lbs		6.55	—
Sodium metasilicate pentahydrate bgs. c.l. works 100 lbs		4.45	—
bgs. l.c.l. works 100 lbs		4.80	6.75
dms. c.l. works 100 lbs		4.95	—
dms. l.c.l. works 100 lbs		5 30	7.25
Sodium molybdate anhyd. dms., works frt equald lb		92	.99
Cryst dms., works, frt alld lb.		74	.76
Sodium monoglutamate (see Monosodium glutamate)			
Sodium monohydrate (see Sodium carbonate monohydrated)			
Sodium naphthionate bbls lb		70	—
Sodium nitrate dom. crude bgs. c.l. works ton.		48.00	—
bulk, c.l., works ton		44.00	—
Imp. 100-lb bgs., c.l. Atl Gulf, Pac. whse ton		48.00	—
bulk, c.l., same basis ton		44 00	—
Sodium nitrite USP bbls., c.l. works, frt equald 100 lbs		9 00	—
bbls. l.c.l. same basis 100 lbs.		11 00	—
Sodium orthosilicate conc., dms. c.l., works 100 lbs		6.70	—
dms. l.c.l. works 100 lbs		7 05	7.65
Sodium orthosilicate, hydrated, flake, bbls., c.l. works 100 lbs		5.65	—
bbls. l.c.l., works 100 lbs		7 60	7.90
Sodium oxalate 98%, bgs., works 100 lbs.		12.35	—

Sodium para-aminobenzoate (see Sodium p-aminobenzoate).			
Sodium para-aminosalicylate (see Sodium p-aminosalicylate)			
Sodium pentachlorophenate, briquets, dms. c.l. works, frt. equald	lb.	.26	—
dms., l.c.l. same basis	lb.	.27½	.34
Pellets, dms. c.l., same basis	lb.	.26	—
dms. c.l., same basis	lb.	.27½	.34
Powd., dms., c.l. same basis	lb.	.25	—
dms. l.c.l., same basis	lb.	.26½	.33
Sodium pentobarbital, USP, dms., 100 lbs or more	lb.	6.00	—
Sodium perborate NF, tech., bgs., c.l. works	lb.	.18½	—
bgs., l.c.l., works	lb.	.19	.21
Sodium peroxide dms., c.l., t.l., dlvd. E. of Miss	lb.	.21½	—
dms., l.c.l., same basis	lb.	.22	.22½
Sodium phenobarbital USP 100-lb [illegible]	lb	3 75	—
Sodium phenosulfonate USP (X), gran. dms	lb.	.52	.53
NF powd. dms	lb	.55	.56
Sodium phosphate, dibasic anhyd., bgs., c.l., frt equald 100 lbs		7.95	—
bgs. l.c.l. same basis 100 lbs		8.35	9.40
Sodium phosphate, duohydrate, bgs., c.l., frt equald 100 lbs		7.60	—
bgs. l.c.l. same basis 100 lbs		8.10	—
USP dried, powd. bgs. dms. works	lb	.19	.20½
Sodium phosphate, monobasic, anhyd., bgs. c.l., frt equald 100 lbs		9.00	—
bgs., l.c.l. same basis 100 lbs		9 40	10 00
Sodium phosphate, tribasic anhyd., bgs. c.l. frt equald 100 lbs		9.05	—
bgs., l.c.l. frt equald 100 lbs		9 45	10 05
cryst., bgs c.l., t.l. frt equald 100 lbs		4.60	—
bgs. l.c.l. frt equald 100 lbs		5 00	5.75
Sodium phosphate tp dms 60c to 80c higher than bgs			
Sodium picramate, tech paste, dms. f.o.b. works frt equald	lb.	.90	—
Sodium prussiate, yellow (see Sodium ferrocyanide)			
Sodium pyrophosphate acid, bgs. c.l. works, frt equald 100 lbs		11 10	—
bgs., l.c.l., same basis 100 lbs		11 85	12 35
Sodium pyrophosphate, terric dms c.l. t.l. works	lb	.36	—
dms. l.c.l. works	lb	.37	.39
Sodium pyrophosphate tetrabasic, anhyd bgs c.l., works, frt equald 100 lbs		7 81	—
bgs., l.c.l. same basis 100 lbs		9.21	9 71
Sodium salicylate USP dms 1,000 lbs or more	lb	78½	—
dms. less than 1,000 lbs dms.	lb	81½	—
Sodium sesquicarbonate bgs. c.l., works 100 lbs		2.35	—
bgs., l.c.l., dlvd zone 1 100 lbs		4.10	4.35
dlvd zone 2 100 lbs		4.35	4 60
Sodium sesquicarbonate, bgs., l.c.l., dlvd zone 3 100 lbs		4.75	4.90
dlvd zone 4 100 lbs		5 35	5 60

Sales zones are: (1) Atl states E of Miss., R and N of south bound of Ky and Va. Ala., La., and Miss. south of 31°; Tex E of 100°; S of 31° Fla.; also Me. N H and Vt in which there are special county zones: Davenport ta., and St Louis. (2) Ark E of 98° Ga.; Iowa (except Davenport) Minn Mo (except St Louis) Neb E of 98° N C., S C., Tenn and Tex N of 31 and E of 100° (except Wichita Falls), also Ala. La and Miss. No of 31°. (3) Ark W of 96° Kan. Neb W of 98° N D., Okla S D Tex. W of 100° (including Wichita Falls excluding El Paso); (4) Ariz., Colo., Idaho Mont Nev. N M., Utah. Wyo and El Paso Tex

Sodium sesquisilicate anhyd bgs. c.l., t.l. works 100 lbs		5.70	—
dms. c.l., t.l. works 100 lbs		6.20	—
Hydrated, bgs., c.l. works 100 lbs		5 00	—
bgs. 6,000-19,900 lb lots works 100 lbs		5.35	—
Sodium sesquisilicate, hydrated, dms., c.l., works 100 lbs		5.50	—
dms. 6,000-19,900 lb lots works 100 lbs		5.85	—
Sodium silicate liq., 40° Be turbid, 1:3.2, dms. c.l. works 100 lbs		1.55	—
dms l.c.l., works 100 lbs		1 90	2.40
tanks works 100 lbs		1.20	—
47° Be., turbid, 1:29.9, dms., c.l., works 100 lbs.		2.25	—
dms., l.c.l. works 100 lbs		2.60	3.45
tanks, works 100 lbs		1.90	—
52° Be turbid, 1:2.4, dms., c.l. works 100 lbs		2.65	—
dms., l.c.l., works 100 lbs		3.00	3.50
tanks works 100 lbs		2.30	—
Sodium silicate, solid, 1:3.2, bgs., works ton.		67.50	—
Sodium silicofluoride, bgs., c.l., works	lb.	.065	—
bgs., l.c.l., works	lb.	.725	—
Sodium silicofluoride in dms. 0.4c. per lb higher			
Sodium stannate, dms. works, frt. alld. E	lb.	.642	.702
Sodium sulfa drugs (see Sulfa name).			
Sodium sulfanilate bbls. works	lb.	.22	—
Sodium sulfate NF VII dried, powd dms	lb	22½	—
Sodium sulfate, tech., anhyd., bgs., c.l., dlvd. E ton.		54.00	—
Tech., detergent, rayon grade, bgs., c.l., works ton.		36.00	—
bulk c.l. works ton.		32.00	—
USP, cryst. fib dms	lb	.17½	.18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works frt equald,	lb.	.07¼	—
dms., l.c.l. same basis	lb.	.08¼	—
Liq., 40-44% tanks works, 100% basis	ton.	130.00	—
Sodium sulfide, flake, dms. c.l., works E., frt equald	lb	06	—
dms. l.c.l., same basis	lb	07	—
Fused, bbls., c.l. works, E., frt. equald	lb	05½	—
bbls. l.c.l., same basis	lb	06½	—
Sodium sulfite, anhyd. bgs., c.l works 100 lbs		7.55	—
bgs. l.c.l. same basis 100 lbs		7.95	—
Sodium sulfite, tech., bgs., c.l., works 100 lbs.		3.50	—
bgs. t.l. same basis 100 lbs		4.00	—
Sodium sulfocyanide CP (see Sodium thiocyanate).			
Sodium tetraborate (see Borax)			
Sodium tetrasulfide liq. 40% dms. c.l., works frt equald	lb.	04½	—
dms., l.c.l. same basis	lb	05½	—
Sodium thiocyanate CP dms	lb.	.55	.65
Tech. anhyd. dms., 1 ton lots or more works	lb	317	—
dms. less than ton lots works	lb.	.337	—
Sodium thiosulfate NF cryst bbls.	lb.	13½	—
Sodium thiosulfate, tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald 100 lbs.		7.75	—
100-lb bgs., l.c.l., t.t.l., frt. equald 100 lbs.		8.15	—
Tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald,	lb.	.0775	—
64-lb. bgs., l.c.l. t.t.l., frt. equald	lb.	.0815	—
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald 100 lbs.		4.95	—
100-lb. bgs. l.c.l., t.t.l., frt. equald 100 lbs.		5.20	—

Naugatuck LATEX



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Whether you have an actual paint "problem" or not, chances are that one of Naugatuck's many paint latices or formulations can help you to improve your product's performance.

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Sodium titanate, ctns., c.l., works, lb. .14¼- —
ctns., 5-ton lots, works ..... lb. .14½- —
ctns., 1-ton or less, works .... lb. .14¾- —
Sodium trichloroacetate, 94%, 100-lb. dms., c.l., frt alld E, lb. .35 - —
50-lb dms., c.l., frt alld E lb. .35½- —
10-lb cns., c.l., frt alld E lb. .42 - —
Prices on Sodium trichloroacetate W of the Rockies are 1¾c per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt equald 100 lbs 8.16 —
bgs., l.c.l., same basis 100 lbs 8.56 9.06
Sodium trisilicate, powd., 1:3.2 bgs., c.l., works 100 lbs 8.95 —
bgs., l.c.l. works .... 100 lbs 9.70 -13.13
dms., c.l., works .... 100 lbs 9.45 —
dms., l.c.l., works ... 100 lbs.10.20 -10.60
Sodium tungstate, tech., kgs dlvd, E lb. 1.09 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
dms. l.c.l. same basis lb. .21½- —
Sodium-zirconyl sulfate, fib dms., 1,000-lb lots or more works lb. .28 - —
fib., dms. smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt equald gal. .30 - .35½
Solvent naphtha, petroleum, aromatic 312°-365°F b.r., 17.2°C m.a.p., tanks, New Jersey gal. .31 - —
315°-350°F b.r., 17.2°C m.a.p., tanks, Texas City gal. .35 - —
342°-351°F, b.r., 15°C, m.a.p., tanks, Baytown, Texas gal. .29 - —
324°-349°F b.r., 16.5°C, m.a.p., tanks, Houston gal. .32 - —
322°-350°F b.r., 17.2°C, m.a.p., tanks, Baytown, Tex. gal. .29 - —
352°-413°F b.r., 17.5°C, m.a.p., tanks, Houston gal. .32 - —
365°-404°F b.r., 19°C, m.a.p., tanks, New Jersey gal. .32 - —
367°-421°F b.r., 20°C, m.a.p., tanks, Baytown, Tex. gal. .30 - —
205°-[illegible]°F b.r., 26°C, m.a.p., tanks, New Jersey gal. .24 - —
211°-277°F, b.r., 25.6°C, m.a.p., tanks, New York, New Jersey gal. .26 - —
221°-278°F b.r. 34.8°C, m.a.p., tanks, Houston gal. .20 - —
232°-325°F, b.r., 41.6°C, m.a.p., tanks, Houston gal. .25 - —
357°-403°F b.r., [illegible] m.a.p., tanks, Houston gal. .26 - —
358°-401°F, b.r., 24.4°C, m.a.p., tanks, New Jersey gal. .38 - —
Sorbitan monostearate, tib dms., 20,000-lb lots, works lb. .33 - —
fib dms. 10,000 to 20,000-lb. lots, works lb. .35 - —
fib. dms. smaller lots works lb. .38 - .40
Sorbitan tristearate, fib dms., 20,000-lb lots works lb. .34 - —
fib dms. 10,000 to 20,000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol cryst. resin grade, pellets, dms., c.l., works lb. .23 - —
dms. 1 to 5-ton lots, works, lb. .25 - .26
Powd., dms., c.l., works .... lb. .36 - —
dms. 1 to 5-ton lots, works, lb. .38 - .39
Soln., coml., aqueous, dms., c.l., works lb. .24¼- —
dms., ton lots, works lb. .25 - —
dms., smaller lots, works lb. .25¼- —
tanks, works lb. .23¾- —
NF, reg., 70% aqueous, dms., c.l., works lb. .16 - —
dms., ton lots, works lb. .16¾- —
dms., smaller lots, works lb. 17 - —
tanks, works ..... lb. .15 - —
Soya protein, chemically isolated, old process, bgs., c.l., works, lb. .23 - —
bgs., l.c.l., works .... lb. .23½- —
Chemically isolated new process, bgs., c.l. works lb. .20 - —
bgs., l.c.l. works ..... lb. .20½- —
Soybean meal, 44%, bulk, unrestricted, Decatur ..ton.57.00 - —
Soybean oil, crude, tanks, Decatur, lb. .08¾- .08½
Foots, soapstock, acid 95%, tanks, N. Y. lb. .05¼- —
Refd., alkali, dms. .....lb. .1268- .1290
tanks .....lb. .1068- —
clarified, dms. .....lb. .1218- .1260
tanks .....lb. .1018- —
salad, dms. .....lb. .12½- .13
tanks .....lb. .10½- —
Soybean oil acids, dbl. dist., dms., lb. .18 - .20½
tanks .....lb. .15½- —
S. D., dms .....lb. .16¾- .19¼
tanks .....lb. .14¼- —
Sparteine sulfate, cns. .....oz. .80 - —
Spearmint leaves, dom., bls. .....lb. .75 - —
Spearmint oil, NF, dms .....lb. 6.00 - 7.00
Sperm oil, bleached, winter, 45°, dms. lb. .1450- .1550
tanks .....lb. .1250- —
Nat., winter, 45°, dms. .....lb. .1350- .1450
tanks .....lb. .1150- —
Spermaceti wax, blocks, cs.....lb. .31 - .33
Cakes, cs .....lb. .32 - .34
Spruce oil cns, dms. .....lb. 2.10 - 3.55
Squill, white, bls .....lb. .16 - .18
powd., bbls., bxs .....lb. .17 - .20
St. John's bread, edible, bls. ...lb. .17 - —
Stannic chloride, anhyd., dms., works..lb. .812 - .834
Stannic oxide, dms., dlvd .....lb. 1.10 - 1.11
Stannous chloride, anhyd dms., works..lb. 1.007 - 1.282
Stannous chloride, hydrous, cryst., works..lb. .87 - .93
Stannous sulfate, dms., works ...lb. 1.002 - 1.102
Star root (see Helonias root)
Stargrass root (see Aletris root)
Stavesacre seed, bgs lb. .60 - .61
Stearic acid, dbl., pressed bgs. lb. .16¼- .18¾
Single-pressed bgs. .....lb. .15¾- .18¼
Triple-pressed, bgs. .....lb. .18 - .20½
Stearine, oleo (see Oleostearine)
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, western Pennsylvania, gal. .16 - —
tanks, group 3.....gal. .13375- —
tankwagon, Boston .....gal. .20 - —
Chicago .....gal. .299 - —
Cleveland .....gal. .23½- —
Los Angeles, ex tax.....gal. .199 - —
Newark .....gal. .19 - —
New York .....gal. .19 - —
Philadelphia .....gal. .19½- —
Pittsburgh .....gal. .19 - —
Stramonium leaves, bgs .....lb. .15 - —
Streptomycin hydrochloride, bulk, gram. .04 - .041
Streptomycin sulfate, bulk...gram. .04 - .041
Strontium bromide, NF, cryst., 100-lb. dm., f.o.b. E. ..lb. .92 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works.lb. .35 - —
dms., 1-ton lots, works .....lb. .37 - —
Tech., dms., works .....lb. .19 - —
Strontium chromate fib. dms., dlvd. lb. .43 - —
Strontium iodide, jars, 25-lb. lots, lb 3.57 - —
Strontium nitrate bgs., c.l., works, 100 lbs.11.00 - —
bgs., l.c.l., works .....100 lbs.12.00 - —
Strontium salicylate, NF, dms. lb 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works ton.56.70 -66.15
Strophanthin G (see Ouabain, USP).
Strophanthin K, bots. ... . oz.25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb 3.50 3.75
Styrax gum, USP cs ..... lb. 4.50 - 5.50
Styrene monomer, polymer grade, 99.6% dms. c.l. frt alld, lb. .17 - —
dms., l.c.l., same basis .... lb. .19 - —
tanks, same basis ..... lb .14½- —
Tech., 99.2%, dms., c.l. ..... lb. .1458- —
dms., l.c.l., same basis... lb. .1658- —
tanks, bulk, same basis.....lb. .1208- —
Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.
Styrolyl acetate, bots. ..... lb. 1.25 - 1.45
Succinic acid, purif., cryst., bbls., works lb. .62 - .75
Sucrose, refd., white, bgs., refy E. lb. .0955- —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l. works lb. 1.00 - —
Sugar (see Sucrose)
Sugar cane wax, dom., refd., slabs, 80-lb. ctns. works lb. .60 - .65
80-lb. ctns., spot... lb. .63 - .75
Sulfabenzamide dms. ..... kilo 8.80 9.90
Sulfabenzamide-sodium, dms. kilo 9.00 -10.10
Sulfacetamide, USP, fib dms. kilo. 6.61 6.83
Sulfacetamide-sodium, USP, fib. dms kilo 8.15 - 9.25
Sulfadiazine, USP, microcrystals, dms kilo.23.35 -24.45
USP, powd., dms. ..... kilo.22.60 -23.70
Sulfadiazine-sodium, USP, dms kilo.24.80 25.90
Sulfaguanidine, NF X, dms kilo 5.50 6.60
dms kilo.23.50 -24.60
Sulfamerazine-sodium, USP, powd., dms kilo.24.80 -25.90
Sulfamethazine, USP XV, microcrystals, dms kilo.19.65 -20.75
USP XV, powd., dms ..... kilo.18.75 -19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs.16.00 - —
dms., l.c.l., t.t.l., works 100 lbs.17.50 -18.50
Gran., dms., c.l., t.l., works 100 lbs.14.75 - —
dms., l.c.l., t.t.l., works 100 lbs.16.25 -17.25
Sulfanilamide, NF X, 30-80 mesh, dms kilo 3.05 3.50
NF X, microcrystals, dms. .. kilo 3.79 - 4.20
NF X, powd., dms. ..... kilo 2.85 - 3.30
Sulfanilamide quinoxaline, veterinary dms kilo.16.28 - —
Sulfanilic acid, tech., dms. c.l., frt, alld lb. .21 - —
dms., l.c.l., frt. alld. ..... lb. .23 - —
Sulfapyridine USP XV, powd. bots. tins kilo.15.45 -16.53
Sulfapyridine-sodium, monohydrate, dms kilo 16.55 -17.65
Sulfathiazole, NF X, microcrystals, dms kilo 6.23 - 6.60
NF X, powd., dms. ..... kilo. 5.50 - 5.85
Sulfathiazole-sodium, NF X, dms. 1,000-lb lots or more lb 2.35 - —
Sulfur, coml., flour, bgs., mines 100 lbs 2.35 - —
bbls., mines ..... 100 lbs 3.30 - —
lump, bgs., mines..... 100 lbs 2.25 - —
bbls., mines ..... 100 lbs 2.80 - —
Sulfur, crude, dom., bright bulk, f.o.b cars, mines long ton.23.50 - —
Export, f.o.b. vessels Gulf ports long-ton.25.00 - —
US and Canada f.o.b vessels Gulf ports long-ton.25.00 - —
Domestic dark sulfur prices are $1 per long-ton lower
Sulfur, crude, imp., bulk, Mexican, filtered f.o.b. vessel, Coatzacoalcos long-ton.24.00 - —
Mexican dark sulfur price is $1 per long-ton lower
Sulfur, refd., flowers, NF, bgs., mines 100 lbs. 5.65 - —
bbls., mines ..... 100 lbs. 7.00 - —
flour, tight, bgs., mines 100 lbs. 5.25 - —
bbls., mines ..... 100 lbs. 6.25 - —
lump, bgs., mines..... 100 lbs. 4.95 - —
rolls, bgs., mines..... 100 lbs 5.50 - —
bbls., mines ..... 100 lbs. 6.25 - —
Sulfur, refd., salt block, bgs., mines. 100 lbs. 4.65 - —
virgin block, bbls., mines 100 lbs 4.70 - —

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Sulfur—Titanium Tetrachloride

Sulfur, rubbermakers, coml., reg., bgs., mines	100 lbs	2.45	-	—
bbls., mines	100 lbs	3.70	-	—
98-100% passing through 325 mesh bgs., mines	100 lbs	2.55	-	—
bbls., mines	100 lbs	3.80	-	—
refd., bgs., mines	100 lbs	4.90	-	—
bbls., mines	100 lbs	6.05	-	—
treated 2.5% mineral oil bgs., mines	100 lbs	2.75	-	—
bbls., mines	100 lbs	4.00	-	—
Sulfur dichloride, ret., dms., c.l., works, frt. equald	lb	.04½		—
ret., dms., l.c.l., same basis	lb	05¼		—
tanks, same basis	lb	04		—
Sulfur dioxide, liq., coml., cyls., works, frt. equald	lb	.10		.12
multi-unit cars, works	lb	0535		—
tanks, works	lb	045		—
Sulfur dioxide, liq., coml., cyls., lb. cyls., dlvd.	lb	.33		—
Sulfur monochloride, 55-gal., non ret., dms., c.l., frt. equald	lb	.04½		—
dms., l.c.l., same basis	lb	05¼		—
tanks, same basis	lb	04		—
Sulfuric acid, 60° Be., cbys., c.l., works	100 lbs	2.00		—
cbys., l.c.l., works	100 lbs	2.30		—
tanks, works	ton	18.60		—
66° Be., cbys., c.l., works	100 lbs	2.25		—
cbys., l.c.l., works	100 lbs	2.55		3.35
tanks, works	ton	22.35		—
Sulfuric acid, 98%, tanks, works	ton	23.50	-	—
99%, tanks, works	ton	23.70	-	—
100%, tanks, works	ton	23.95	-	—
CP, NF, consumers' cbys., c.l., frt. equald	lb	.12¾-		—
consumers' cbys., l.c.l., same basis	lb	.14¼-		.14¾
5-pt. bots., extra cs., c.l., works, frt. alld	lb	16¼		—
5-pt. bots., extra cs., l.c.l., same basis	lb	17¾		.18¾
Sulfuric acid, fuming (oleum) 20% tanks, works	ton	25.00	-	—
40%, tanks, works	ton	29.00	-	—
65%, tanks works	ton	39.50	-	—
Superphosphate, run-of-pile, under 22% a.p.a., pulv., bulk, c.l., Baltimore	unit-ton	.90	-	.93
bulk, c.l., Carteret, N. J.	unit-ton	.90	-	.93
bulk, f.o.b. vessel	unit-ton	1.02	-	—
Superphosphate, triple 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla.	unit-ton	98	-	—
Sweet birch oil, USP., northern, cns.	lb	4.00		9.50
USP., southern, cns.	lb	2.00		3.05

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2,4,5-T, dms., c.l., works, frt. equald.	lb	1.18	-	—
dms., l.c.l., same basis	lb	1.25	-	—
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald	lb	1.24	-	—
dms., l.c.l., works	lb	1.29	-	—
Talc, dom., fibrous New York, grd., bgs., c.l., works	ton	28.00		—
bgs., l.c.l., works	ton	31.00		36.00
fibrous, New York 99.5% 325 mesh, bgs., c.l., works	ton	31.00	-	—
bgs., l.c.l., works	ton	34.00	-	—
fibrous, 99.95%, 400 mesh, micronized, bgs., c.l., works	ton	38.00	-	—
625 mesh, micronized, bgs., c.l., works	ton	80.00	-	—
erd., Calif., gran., bgs., c.l., works	ton	34.00		39.50
Vermont, off-color, grd., bgs., c.l., works	ton	19.40		—
bgs., l.c.l., works	ton	37.00		—
imp., Canadian, grd., bgs., c.l., mines	ton	20.00		35.00
Tall oil, crude, dms., c.l., works	lb	04¼		04½
tanks, works	lb	02¾		03
Dist., dms., c.l., works	lb	07¾		—
dms., l.c.l., works	lb	08		08½
tanks works	lb	06		06½
Refd., dms., c.l., works	lb	06¾		—
dms., l.c.l., works	lb	07		07½
tanks works	lb	05½		.06
Tall oil acids, dms., c.l., works	lb.	.09		.12
dms., l.c.l.	lb.	.09½		.12½
tanks, works	lb.	.07¼		10
Tallow, edible, tanks, dlvd.	lb.	.08¾-		.09⅜
Inedible, fancy, bleachable, tanks.	lb.	.06¼		—
fancy, guaranteed, dms., t.a.s.	lb.	.08⅛		Nom.
No. 1, tanks, dlvd.	lb.	.05¼-		—
prime, tanks, dlvd.	lb.	.06	-	—
special, tanks, dlvd.	lb.	.05⅝-		—
sulfonated 25% bbls., l.c.l.	lb.	.08⅜		08⅞
50% bbls., l.c.l.	lb	.10½		.11
Tallow acids, dist., dms.	lb.	.14¼-		.16¼
tanks	lb.	.11⅝-		—
Hydrogenated, dms.	lb.	.15¾		.18¼
Tallow oil, acidless, dms., c.l.	lb.	.13½		Nom.
dms., l.c.l.	lb.	.14½		.16
Tangerine oil, Florida, dms.	lb.	3.10		4.00
Tankage, animal, feeding, 9-11% ammonia, New York bulk unit-ton.		5.00	-	—
Animal, feeding, 9-11% ammonia, Chicago, bulk unit-ton.		5.75	-	—
Tannic acid, NF, fluffy, bbls., 1,000-lb lots	lb	2.05		—
bbls., smaller lots	lb	2.06		2.07
NF, powd., bbls., 1,000-lb. lots	lb.	1.95	-	—
bbls., smaller lots	lb	1.96		1.99
Tech., dms.	lb	1.05		—
Tansy oil, dms.	lb.	7.25		7.50
Tar acid oil, 15-18%, dms., c.l., frt. equald	gal.	.53½	-	—
dms., l.c.l., same basis	gal.	.55½	-	—
tanks, same basis	gal.	43½	-	—
25-28% dms., c.l., same basis	gal.	.60	-	—
dms., l.c.l., same basis	gal.	.62	-	—
tanks, same basis	gal.	.50	-	—
50-53%, dms., c.l., same basis	gal.	.75	-	—
dms., l.c.l., same basis	gal.	.77	-	—
tanks, same basis	gal.	.65	-	—
Tar, coal (see Coaltar)				
Tartar emetic (see Antimony potassium tartrate)				
Tartaric acid, NF, 100-lb bgs., c.l., frt. equald	lb.	.41	-	—
bgs., 10,000 lbs., 1 shipt., same basis	lb.	.43	-	—
bgs., smaller lots, same basis	lb.	.47	-	—
Terpine hydrate, NF, cryst., powd., 100-lb fib dms	lb.	70	-	—
Terpineol, extra, dms.	lb.	.50	-	.60
Prime, dms.	lb.	.40		.50
Terpinyl acetate, extra, cns., dms.	lb.	.64		75
Prime, dms.	lb.	.53		56
Terpinyl propionate, dms.	lb	1.75		3.00
Terra alba (see Gypsum).				
Testosterone, USP, bots.	gram			No prices.
Testosterone proprionate, USP, bots.	gram			No prices.
Tetrachloroethane, dms., works	lb	.14½		—
Tetrasodium pyrophosphate (see Sodium pyrophosphate)				
Tetrachloroethylene, tech. (see Perchloroethylene)				
Tetrachloroethylene, USP, 55-gal., dms., c.l., t.l., works	lb.	.20½	-	—
dms., l.c.l., works	lb.	.22		.23½
Tetraethyl orthosilicate, dms., c.l., dlvd. E	lb.	.60	-	—
dms., l.c.l., dlvd. E	lb.	.61½	-	—
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald	lb.	.75	-	—
Tetraethylenepentamine, dms., c.l., dlvd. E	lb.	.53½	-	—
dms., l.c.l., dlvd. E	lb.	.55	-	—
tanks, dlvd. E	lb.	.51	-	—
Tetraethylthiuram disulfide, tech., dms., frt. alld	lb.	1.04	-	—
Tetrahydrofuran, dms., c.l., t.l., works	lb.	.36½	-	—
dms., l.c.l., or t.t.l., works	lb.	.37	-	—
tanks, works	lb.	.35	-	—
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn.	lb.	.31½	-	—
dms., l.c.l., Memphis, Tenn.	lb.	.32½	-	—
dms., c.l., t.l., Newark, N.J.	lb.	.33½	-	—
dms., l.c.l., Newark, N.J.	lb.	.34½	-	—
tanks, dlvd. E. of Denver	lb.	.31	-	—
tanks, dlvd. W. of Denver	lb.	.32	-	—
Tetrapotassium phosphate (see potassium phosphate).				
Thallium metal, divo	lb.	7.50		10.00
Thallium sulfate, 99% bots., dlvd.	lb.	5.00		10.00
Theobromine, NF, fib. dms.	lb.	4.50		—
Theobromine and sodium acetate, USP, fib. dms.	lb.	4.75	-	—
Theobromine sodio-salicylate, NF, fib. dms.	lb.	3.90	-	—
Theophyline, USP, anhyd., 100-lb. dms., frt. alld.	lb.	3.65	-	—
Thiamine hydrochloride, USP, fib. dms., frt. alld.	kilo.	36.00	-	—
USP, ampule grade, fib. dms., frt. alld.	kilo.	38.00	-	—
Thiamine mononitrate, USP, fib. dms., frt. alld.	kilo.	36.00	-	—
Thiocarbanilide, dms., ton lots	lb	72	-	—
dms., less ton lots	lb	74	-	—
Thiodiphenylamine (see Phenothiazine).				
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works	lb.	5.20	-	—
Tungstated, PTMA, kgs., works.	lb.	6.20	-	—
Thioglycolic acid, refd., cbys., 100% basis	lb.	1.35	-	1.55
Thiosalicylic acid, purif., dms., 1,000-lb., lots, works	lb.	4.00	-	—
Thiourea, tech., bgs., t.l. frt. alld.	lb.	.30	-	—
bgs., ton lots, same basis	lb.	.32	-	—
bgs., less than ton lots, same basis	lb.	33	-	—
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works	lb	3.50	-	—
dl-Threonine, bots., 1-kilo lots	kilo.	275.00	-	—
Thyme, leaves, French, bgs.	lb	.29	-	—
Spanish, bgs.	lb	.14	-	—
Thyme oil, NF, red, cns., dms.	lb	2.00		2.25
Tech., white, cns.	lb	.40		1.85
USP, white, cns.	lb	2.20		2.60
Thymol, fib. dms.	lb	2.60		3.00
Thymol iodide, NF, dms.	lb.	7.30		—
Timbo root (see Cube root).				
Tin chloride (see Stannous chloride, anhyd.)				
Tin crystals (see Stannous chloride, hydrous)				
Tin metal (Straits)	lb.	1.02	-	—
Tin oxide (see Stannic oxide)				
Tin sulfate (see Stannous sulfate).				
Tin tetrachloride, anhyd. (see Stannic chloride, anhyd.).				
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd.	lb.	.25½	-	—
bgs., l.c.l., dlvd.	lb.	.26½	-	—
reg., bgs., c.l., dlvd.	lb.	.25½	-	—
bgs., l.c.l., dlvd.	lb.	.26½	-	—
Titanium dioxide, anatase, metallurgical, nat., bgs., c.l., f.o.b. Jacksonville, Fla.	ton.	180.00	-	—
bgs., 5-ton lots, Niagara, Falls, N.Y.	ton.	205.00	-	—
bgs., ton lots, same basis.	ton.	215.00	-	—
Milled metallurgical titanium dioxide $7.50 per ton higher.				
Titanium dioxide, rutile, non-chalking, bgs., c.l., dlvd., E.	lb.	.27½	-	—
bgs., l.c.l., dlvd. E	lb.	.28½	-	—
Titanium dioxide-calcium pigment, 30% TiO_2, reg., bgs., c.l., dlvd	lb.	.09⅜	-	—
bgs., l.c.l., works	lb.	.09⅞	-	—
50% TiO_2, high-tinting, dms., c.l.	lb.	.14⅜	-	—
dms., l.c.l.	lb.	.14⅞	-	—
Titanium hydride, powd., dms., works	lb	8.10		9.00
Titanium tetrachloride, tech., dms., c.l., works	lb.	26	-	—
dms., l.c.l., works	lb.	.27½	-	.29
tanks, works	lb.	20	-	—

MONTROSE
CHEMICAL COMPANY

100 LISTER AVENUE
NEWARK, NEW JERSEY

Dimethyl Isophthalate

Trimethyl Borate — Trimethoxy Boroxine

T.C.P. — Tricresyl Phosphate

Mono Cresyl Diphenyl Phosphate

D.D.T. — Dichloro Diphenyl Trichloroethane

Ethyl Silicate 28% — 40%

D.D.V.P. — Dimethyl Dichloro Vinyl Phosphate
(Minimum 95% Purity)

D.E.T. — Diethyl Toluamide
(95% Meta Isomer)

EXCLUSIVE SALES AGENTS

R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

Tobias acid, dms., c.l., t.l..... lb. .78 - —
dms., l.c.l. ..... lb. .81 - —
d-a-Tocopherols, mixed, NF, conc., pure basis, bots. kilo.67 00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo.122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo.109.00 - —
dl-a-Tocopherol, bots ..... kilo.99.00 - —
dl-a-Tocopheryl acetate bots .. kilo.90 00 - —
25% dry, powd., bots. .... kilo.22 50 -24.00
33% dry powd. bots. .... kilo.30 00 -31.50
o-Tolidine base, dry, kgs., 100% basis lb 1.55 - —
Paste kgs. 100% basis ... lb 1.50 - —

TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride, paste, kgs., 100% basis lb 1.50 —
Tolu balsam, ens ..... lb. 2.65 - 3.10
Toluene, coaltar, indust. or nitration tanks, dlvd. E of Rockies gal. .25 - —
Toluene petroleum indust tanks, dlvd E. of Rockies gal .25 - .32
p-Toluenesulfonamide powd. dms., t.l., works lb. .60 - —
dms. t.t.l., same basis lb. .63 - —
Toluenesulfonic acid, dms., c.l., t.l. works lb. .17 - —
dms. t.c.l. works lb. .18 - —
p-Toluenesulfonic acid monohydrate, dms., c.l. or t.l. lb. .90 - —
dms., 125 lbs to t.l... lb. 1.00 - —
m-Toluidine dms. c.l. works, frt. alld lb. .79 - —
dms., t.c.l., same basis ..... lb. .80 - —
tanks, same basis ..... lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .30 - —
dms., t.c.l., same basis ..... lb. .31 - —
tanks, same basis ..... lb. .28 - —
p-Toluidine tech. flake dms., frt. alld lb. .50 - —
Cast, dms. frt. alld ..... lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs. works. ... lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., t.c.l. frt. alld lb 1.10 - —
Tonka beans, Angostura, cks. .. lb. 1.50 - 1.60
Brazilian, Surinam cs ... lb. 1.25 - 1.30
Totaquine, 100-oz. lots, cns .....oz, .42 - —
Toxaphene dms c.l t.l. works lb .22 - —
dms., t.c.l., t.l.,. works ... lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs lb. 3.60 - 3.75
No. 2, cs ..... lb. 3.40 - 3.60
No. 3, cs ..... lb. 3.15 - 3.25
USP, powd., bbls. ..... lb. 1.05 - 1.15
Triacetin dms., c.l., dlvd. E. of Rockies lb. .39 - —
dms., t.c.l., same basis. ... lb. .40 - —
tanks, same basis ..... lb. .37 - —
Triallylamine, dms., c.l., dlvd. lb .985 - —
dms., t.c.l., dlvd. ..... lb. .995 - —
tanks, dlvd. ..... lb. .96 - —
Tributyl citrate, tech., non-ref. dms., c.l., frt alld E of Denver, lb. .42½- —
non-ref dms., t.c.l., trt. alld. E. of Denver lb. .43½- —
tanks, trt. alld. E of Denver lb. .40 - —
Tributyl phosphate, dms. c.l., works, lb. .52½- —
dms., t.c.l., same basis. ..... lb. .53½- —
tanks, same basis. ..... lb. .50 - —
Tributylamine dms., c.l., works lb .67½- —
dms., t.c.l., same basis ..... lb. .69 - —
tanks, same basis. ..... lb. .65 - —
Trichloroacetic acid, bots. ..... lb. 2.00 2.50
Trichlorobenzene, dms., c.l., frt. alld. E lb. .15 - —
dms., t.c.l., frt. alld. E. ..... lb. .16 - —
tanks, frt. alld. E. ..... lb. .13¼- —
Trichlorobenzene prices in the West 1¾c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼- —
dms., t.c.l., dlvd. ..... lb. .16¼- —
tanks, dlvd. ..... lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .13½- —
dms., t.c.l., dlvd. E. ..... lb. .14¼- —
tanks, works ..... lb. .11½- —
Trichloroethylene, dms., c.l., nr t.l., works, frt. equald lb. .13 - —
dms., t.c.l., frt. alld. ..... lb. .15 - .16¾
tanks, works, frt. equald. .... lb .12 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ref. chys. works, frt adjusted, lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., t.c.l., dlvd. ..... lb. .36 - —
tanks, dlvd. ..... lb. .32½- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd. ..... lb. .34½- —
dms., t.c.l., dlvd. ..... lb. .35½- —
tanks, dlvd. ..... lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E lb. .26½- —
dms., t.c.l., dlvd. E ..... lb. .28 - —
tanks, dlvd E ..... lb. .24 - —
Triethanolamine dms. c.l. dlvd E. lb. .24½- —
dms., t.c.l., same basis ..... lb. .26 - —
tanks, same basis ..... lb. .22 - —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms., t.l.l., frt. alld. ..... lb. .26½- —
tanks, frt. alld ..... lb. .24½- —
Triethylamine, dms. c.l., dlvd E. lb. .50 - —
dms., t.c.l., same basis ..... lb. .51½- —
tanks, same basis ..... lb. .47½- —
Triethyl citrate, refd., tech., non-ref. dms., c.l., frt. alld E. of Denver lb. .46¼- —
non-ref. dms., t.c.l., frt. alld. E of Denver lb. .47¼- —
tanks, frt. alld E. of Denver lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., t.c.l., dlvd. ..... lb. .41½- —
tanks, dlvd. ..... lb. .38 - —
Triethylene glycol, dms., c.l. dlvd. E lb. .21 - —
dms., t.c.l., dlvd. E. ..... lb. .22½- —
tanks, same basis ..... lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms., t.c.l., dlvd. E. ..... lb. .53 - —
tanks, dlvd E. ..... lb. .49 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., t.c.l., dlvd E. ..... lb. .24¾- —
tanks, dlvd. E. ..... lb. .20¾- —

Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 - .309
tanks, same basis ..... lb. .26 - —
basis lb. .26 - —
25-40% soln., dms., c.l., works, frt. equald, 100% basis lb. .35 - —
dms., l.c.l., works, frt. equald., 100% basis lb. .35½- —
tanks, works, frt. equald, 100% lb. .35½- —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .35 - —
dms., l.c.l., l.t.l., same basis lb. .36 - —
Trioxane, pure, dms. c.l., t.l., works. lb. .50 - —
dms., l.c.l., works ... lb. .51½- —
Tripentaerythritol, c.l., t.l., dlvd. E. lb. .40 - —
bgs., l.c.l., l.t.l., dlvd E. ... lb. .41 - —
Triphenyl phosphate, bbls., c.l., frt equald lb. .41½- —
bbls., l.c.l. frt equald lb. .43½- —
Triphenylguanidine, bbls. works.lb. .90 - —
Tripropylene glycol dms., c.l., t.l., frt alld. E lb. .21 - —
dms., l.c.l., l.t.l., frt. alld. E lb. .22½- —
tankcars and compartmented tankcars, frt. alld. E lb. .18½- —
Tripropylene glycol tankwagons and compartmented tankwagons, 1,000 gals. min., frt alld E lb. .19 - —
Tripropylene glycol prices 1c. per lb. higher in West.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Tryptophane 6lb., dms., works. lb.55.00 - —
Tung oil, dms., c.l., New York lb. .25½- —
dms., l.c.l. New York ..... lb. .25¾- .26
tanks, New York ..... lb. .24 - —
tanks, domestic, mills..... lb. .22¾- .23¼
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb 3.54 - —

Tungstic acid, tech., dms., 1,000-lb. lots, works lb 2.25 - —
dms., smaller lots, works lb 2.45 - —
Turkey red bbls. works ... lb. 62 - —
Turpentine, gum (see Protective Coatings market Naval Stores).
Turpentine oil, NF, ens, dms lb .28 .50
Tuscan red, bbls. frt. equald lb. .26 .33
Tyrothricin, USP 1 to 5 kilos gram. .54 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb bbls., dlvd. E of Rockies lb .35 - .39½
Jobbing types, bbls., same basis lb. .19 - —
Regular types, dry bbls., same basis lb. .22½- .35
Ultramarine blue prices 1c higher W of Rockies
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., l.c.l. works lb. .07¾- .08
Turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .08¼- —
Umber pigment, raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb. 08½- .08¾
Undecylenic acid, dms ..... lb. 1.28 - —
Unicorn root, false (see Helonias root).

Unicorn root, true (see Aletris root)
Urea 46% N. indust. bgs, c.l. t.l., dlvd E ton 125 00 —
bgs., l.c.l. dlvd E ex whse ton 145 00 —
45% N. agricultural, bgs, c.l., (30 tons) dlvd E ton 103 00 —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt equal ton 120 00 —
37 grade tanks same basis ton 145 00 —
Urethane USP, dms. t.l., f.o.b. works lb 65 —
dms., l.t.l., same basis lb 70 —
Uva-ursi leaves, bls ..... lb 12 —

V

Valerian root, Belgian bgs..... lb 32 —
Indian, bgs. ..... lb 25 —
dl-Valine dms. works lb.21 00 27 50
Vanadium pentoxide, tech., dms., works lb 1.28 1.33
Vandyke brown bbls works lb 09½ 12
Vanilla beans, Bourbon tons .. lb.15.75 - —
Mexican, cuts, tins .... lb.15.75 - —
whole, tins ..... lb.16.00 - —
Vanillin ex lignin 100-lb fib dms. 1,000-lb. lots or more lb. 3.00 - —
100-lb fib dms., 500-lb lots lb 3.10 - —
100-lb. fib dms., ens. 100.-lb. lots lb. 3.25 3.35

COMPARE THE PROPERTIES
OF DELHI-TAYLOR TOLUENE
• higher aromaticity
• greater solvency
• high purity
CHEMICAL DIVISION
DELHI-TAYLOR
CHEMICAL MATERIAL SPECIFICATIONS
toluene
The properties of Delhi-Taylor Nitration Grade Toluene speak for themselves . . . the typical analysis below indicates its exceptionally low paraffin content, high K B value and freedom from sulfur and thiophene.
TYPICAL ANALYSIS
Sp. Gr. .8708
Gravity, °API 31.0
Weight, lbs./gal. 7.251
Color Less than 0.001 gr. $K_2Cr_2O_7$ per liter of water; 30 + Saybolt
Distillation—IBP 110.0°C.
DP 110.8°C.
Paraffins 0.04%
Acid Wash Color Less than No. 1 color standard
K.B., Toluene 105
Flash TCC 46°F.
Mixed Aniline Point 50°F.
Volume % Aromatics 99.95+
Sulfur Free of H_2S, SO_2
Bulk deliveries of Delhi-Taylor Toluene are efficiently handled from our plant in Corpus Christi, Texas and from our marketing terminals.
Send today for our up to date Petrochemicals File.
CHEMICAL DIVISION
DELHI
DELHI-TAYLOR OIL CORPORATION
415 MADISON AVE. · NEW YORK 17, N. Y.

Venetian red, jobbing, bgs., works, lb. .0475- —
Venetian red, 20%, bgs., works lb. .0525- —
25% bgs., works lb. .0575- —
30% bgs., works lb. 06 - —
35% bgs. works lb. .0625- —
40% bgs. works lb 0675- —
Vetiver oil, Bourbon, cns. lb.16.00 -16.50
Haitian, cns. lb.14.00 -15.50
Victoria blue toner, molyhdated, PMA 250-lb bbls., dlvd. E of Rockies lb 4.50 • —
Victoria blue toner, tungstated, PTA, 250-lb bbls., dlvd. E. of Rockies lb. 5.55 • —
Victoria blue toner, bbls., prices 1c higher W of Rockies
Vinyl acetate monomer, zone 1, 55-gal dms., c.l. dlvd lb. .20 - —
55-gal dms. t.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. 17½- —
tanktrucks less than 4,000 gal., dlvd lb .18 - —
Zone 2, 55-gal. dms. c.l. dlvd lb. .21 - —
55-gal dms., t.c.l., dlvd. lb. 24 - —
tanks, dlvd. lb. 18½- —
tanktrucks less than 4,000 gals., dlvd lb. .19 • —
Zone 1 is all continental US except zone 2. zone 2 comprises Ariz. Calif., Idaho, Mont., Nev., Ore., Utah and Wash
Vinyl n-butyl ether, tech., dms., t.c.l., works lb. .50 • —
Vinyl chloride monomer, tanks, works lb. .125 • —
Vinyl ether, USP, anesthesia, bots., 50cc., hospitals bot. 1.13 • —
bots., 75cc., hospitals bot. 1.56 • —
Vinyl ethyl ether, tech. dms., c.l., works lb. .29¼- —
dms., t.c.l., works lb. .30 - —
tanks, works lb. .27¼- —
Vinyl proplonate monomer, dms., c.l. dlvd lb. .49 - —
dms., t.c.l., same basis lb .50 • —
tanks, same basis lb. .47 • —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 • —
1 to 9 dms., works lb. 1.35 • —
tanks, works lb. 1.15 • —
Vinyltoluene dms., c.l., f.o.b., works, lb. .16½- —
dms., t.c.l., same basis lb. .18½- —
tanks, f.o.b. dest. frt. prepaid lb. .14 • —
Viosterol, in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. 02½- —
Virginia type red, bbls., works lb. 1.40 • —
Vitamin A acetate, syn., cryst., beads 500,000 A units per gram gram. .07¼- —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots. kilo67.50 • —
325,000 units per gram, same basis kilo.43.88 • —
250,000 units per gram, same basis kilo.33 75 • —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
Vitamin A, liq. in oil, 1,000,000 A units per gram, 1,000,000 units .10 • —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 • —
Vitamin A palmitate, liq in oil, 1,000,000 A units per gram, 1,000,000 units. .10 • —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tons gram.120.00 • —
0.1% vitamin B_{12} USP, adsorbed on gelatin 100 and 500-gram bots, on 1-5 kilo dms. gram. 1.43 • —
0.1% vitamin B_{12}, USP adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram. 1.43 • —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B_{12} activity.gram.110.00 • —
0.1 percent trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo.138.00 • —
Vitamin B_{12}, 0.1% cobalamin concentrate NF, adsorbed on resin, 500-gram bots., 1-5 kilo dms., frt. alld. gram. 1.15 • —
0.1% cobalamin concentrate in gelatin, 1-10 kilo dms., frt. alld. gram. 1.15 • —
Vitamin C (see Ascorbic acid).
Vitamin D (see Codliver and Fish-liver oils, Calciferol and Viosterol).
Vitamin D_2, dry, 850,000 units per gram, kilo lots kilo 42.50 • —
850,000 units per gram less than kilo lots kilo45.00 • —
Vitamin E (see a-Tocopherol and Wheat germ oil)
Vitamin G (see Riboflavin).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin K_1, 25 gram bots .. gram. 4.50 —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls. lb. 2.25 - 2.50
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 • —
dms., 25-49-lb. lots, New York or Chicago lb 2.05 • —
dms., 5-24-lb. lots, New York or Chicago lb 2.15 • —
Watchung-type reds, bbls lb 1.95 • —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal dms .. gal.12.25 - —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb. .21 - .22
White precipitate USP powd dms., lb 6.55 - —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls. lb. .22 - —
Thin, rossed, bls. lb. .22 Nom.
Wintergreen oil, USP, nat., northern, cns lb 6.35 -17.50
USP, nat., southern, cns lb 3.75 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls. lb .16 - .17
Witch hazel leaves, bls. lb .22 - —
Wollastonite fine bgs. c.l., works ton 39.50 • —
bgs. t.c.l., ex whse. ton.56.00 • —
Medium, bgs. c.l., works .. ton.27.00 • —
bgs., t.c.l., ex whse. ton.44.00 • —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat, crude (see Degras).
Woolfat, USP (see Lanolin).
Wormseed, Levant, bgs lb. 2.50 • —
Wormseed oil (see Chenopodium oil, NF).
Wormwood oil, cns. lb. 4.75 5.00

X

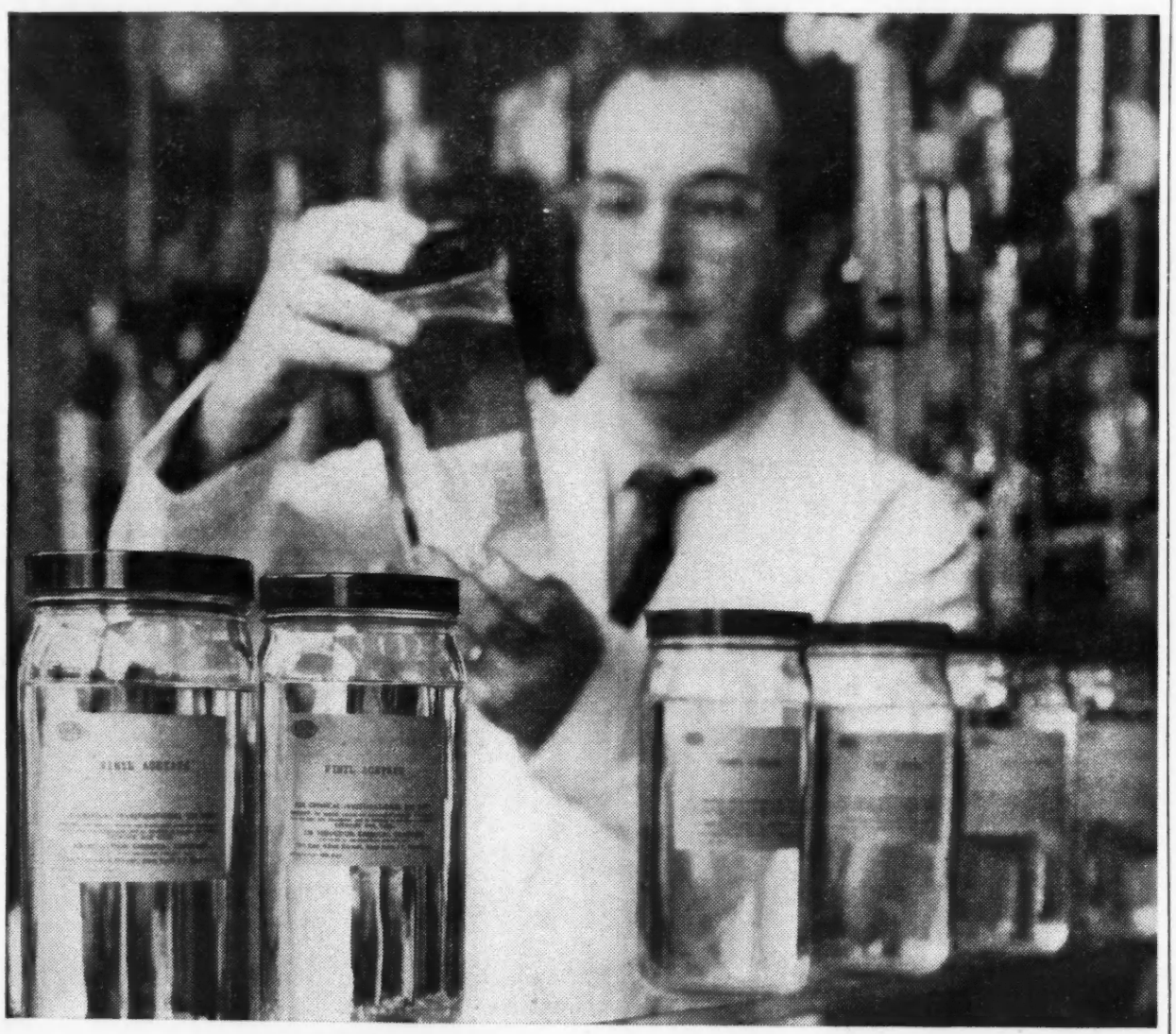
Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. gal. .29 • —
Birmingham dist. gal. .29 • —
Chicago dist. gal. .28½- —
Cleveland dist. gal. .29 • —
Geneva, Utah gal. .29 • —
Johnstown, Pa. gal. .29 • —
Lackawanna, N. Y. gal. .29½- —
Lone Star, Tex. gal. .27 • —
Lorain, Ohio gal. .29 • —
Middletown Ohio gal. .30 • —
Minnequa, Col. gal. .29 • —
Philadelphia dist gal. .29 • —
Pittsburgh dist gal. .29 • —
Sparrows Point, Md. gal. .29 • —
Terre Haute, Ind. gal. .29 • —
Youngstown Ohio gal. .29 • —
Xylene, petroleum, indust., tanks, f.o.b works:
Bayonne N J. gal. .29 • —
Baytown, Tex. gal. .27 • —
Charleston, S C. gal. .29 • —
Chicago Ill. gal. .28½- —
Detroit, Mich. gal. .29 • —
Houston, Tex. gal. .27 • —
Philadelphia Pa. gal. .29 • —
Providence, R. I. gal. .30 • —
Sewell's Point, Va. gal. .28 • —
Wood River, Ill. gal. .28½- —
Xylenol, cryst., 45°-47° C., m.p., dms., t.c.l., works lb. .23 • —
56°-58° C., m.p., dms., t.c.l., works, frt. equald lb. .33 • —
60°-62° C., m.p., dms., t.c.l., same basis lb. .40 • —
Xylenol fraction, b.r 7°-9° C., dry above 227° C., dms., c.l., same basis gal. 1.25 • —
dms., t.c.l., same basis gal. 1.30 • —
tanks, same basis gal. 1.05 • —
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis. gal. 1.35 • —
dms., t.c.l., same oasis gal. 1.40 • —
tanks, same basis gal. 1.15 • —
2,4-Xylidine, tech., dms. frt. alld. lb. 1.15 • —
2,5-Xylidine, tech., dms. frt. alld. lb. 1.20 • —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb. .39 • —
dms., t.c.l., same basis lb. .40 • —
tanks, same basis lb. .38 • —

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns. lb. 2.15 - 3.05
Yeast, brewers, debittered, USP, Saccharomyces dlvd lb. .27 • —
Yeast, brewers, dry, USP, 50 Int'l B units per gram, 100-lb. dms. lb. .47 • —
USP, 90 Int'l B units per gram, 100-lb dms lb. .52 • —
USP, 200 Int'l B units per gram, 100-lb dms lb. .56 • —
USP, 300 Int'l B units per gram, 100-lb. dms lb. .60 • —
Torula, USP, dlvd lb. .18 • —

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.



AIRCO
VINYL ACETATE MONOMER
99.8%+PURITY... *always*

The reaction characteristics of Airco vinyl acetate monomer are consistent because its high purity is consistent. Every shipment of Airco vinyl acetate monomer is carefully pretested for its speed of reaction. This guarantees consistent reaction characteristics from lot to lot.

In addition, every bulk shipment of Airco vinyl acetate monomer must pass inspection by spectrophotometric analysis.

Consistent high purity pays off. Get it with Airco vinyl acetate monomer.

AT THE FRONTIERS OF PROGRESS YOU'LL FIND...

AIRCO

AIR REDUCTION CHEMICAL COMPANY
A division of Air Reduction Company, Incorporated
150 East 42nd Street, New York 17, N. Y.
Represented Internationally by Airco Company International

Yerba santa leaves, bls.	lb.	.40	- .45
Ylang-ylang oil, Bourbon, bots	lb.	7.00	-22.00
extra, bots.	lb.	28.00	-33.00
Yohimbine hydrochloride, bots., tins.	oz.	3.75	- 4.25

Z

Zein, bgs., 36,000-lb. lots or more,	lb.	.343	- —
bgs. 500-lb lots or more, dlvd.	lb.	.373	- —
bgs. smaller lots, dlvd	lb.	.53	- —
Zinc acetate, NF, VIII, dms.	lb.	.29¾	- —
Tech., dms. l.t.l. works	lb.	.23	- —
Zinc borate bgs. 1,000 lbs or more, works	lb.	.25	- —
bgs. less than 1,000 lbs. same basis	lb.	42	- —
Zinc chloride, NF, gran. dms	lb	.26	- —
NF, precip., powd., dms	lb.		
Tech soln. 50% dms c.l., works.	100 lbs	5.80	- —
dms., l.c.l., works	100 lbs.	6.40	- —
tanks, works	100 lbs.	5.15	- —
fused, dms., c.l. works	100 lbs.	10.70	- —
dms. t.c.l. works	100 lbs	11.20	- —
gran., fib dms. c.l., works	100 lbs.	11.45	- —
fib dms. t.c.l. works	100 lbs.	11.95	- —
Zinc chromate bbls. dlvd	lb	.29	- —
Basic, bbls. dlvd	lb.	.34	- —
Zinc cyanide, dms. 1,000-lb lots or more, works	lb	.55	- —
dms., smaller lots, works	lb.	.57	- —
Zinc dust, comt. bbls. c.l. works.	lb.	.1460	—
Pigment, bbls., c.l., works	lb.	.15	- —
bbls., l.c.l. works	lb.	.16	- —
Zinc fluoride, bbls., works	lb.	49	50
Zinc hydrosulfite dms., c.l., frt. alld	lb.	.21½	—
dms. t.c.l. frt alld	lb.	.23½	—
Zinc metal, prime western slabs, E. St. Louis	lb.	.13	- —
Prime western slabs New York.	lb.	.13½	- —
Zinc naphthenate liq. 8% Zn., dms., frt. alld	lb.	.27	- —
10% Zn., dms., frt. alld	lb.	.33	- —
Zinc nitrate tech., cryst., bbls., works	lb.	.20	- —
Zinc oxide pigment, American process,, lead-free bgs. c.l., frt. alld	lb.	.14½	—
bgs. t.c.l. 10 tons or more, same basis	lb.	.15	- —
bgs. t.c.l. smaller lots, same basis	lb.	.15½	—
leaded 35% bgs c.l., mills, frt. alld	lb.	.15⅝	—
bgs. t.c.l. 10 tons or more, same basis	lb.	.15⅞	—
leaded 50% bgs. c.l., same basis	lb.	.15¾	- —
bgs., t.c.l. 10 tons or more, same basis	lb.	.16¼	- —
bgs. t.c.l. smaller lots, same basis	lb.	.16⅜	—
Zinc oxide pigment, French process, green seal, bgs., c.l., mills, frt. alld	lb.	.16¼	- —
bgs., t.c.l. 10 tons or more, same basis	lb.	.16¾	- —
bgs. t.c.l. smaller lots, same basis	lb.	.17¼	- —
red seal bgs. c.l same basis,	lb.	.15¾	—
bgs., t.c.l. 10 tons or more, same basis	lb.	.16¼	- —
bgs. t.c.l. smaller lots, same basis	lb.	.16¾	- —
white seal bgs. c.l., same basis	lb.	.16¾	- —
bgs., t.c.l. 10 tons or more, same basis	lb.	.17¼	- —
bgs., t.c.l. smaller lots, same basis	lb.	.17¾	- —
Zinc oxide, USP dms. c.l. frt alld.	lb.	.18¼	- —
dms. t.c.l. 10 tons or more, same basis	lb.	.18¾	- —
dms. t.c.l. smaller lots, same basis	lb.	.19¼	- —
Inc phenolsulfonate, NF gran., dms	lb.	.45	- .46
NF, powd., dms	lb.	.48	- .49
Zinc resinate, precip., 7.2-7.6% Zn., dms., frt. alld	lb.	.36¼	- —
Zinc silicofluoride, dms., works	lb.	.12½	- .14
Zinc stearate, tech., USP ctns., c.l.,	lb.	.41	—
ctns., l.c.l.	lb.	.42	- .46
Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd. E	100 lbs.	8.75	- —
bgs., t.c.l., dlvd. E	100 lbs.	9.75	- —
USP, gran., dms.	lb.	.26	- —
Zinc sulfate in bbls 40c. higher.			
Zinc sulfide pure, bgs. c.l., dlvd	lb.	.2530	- —
Zinc undecylenate, dms	lb.	2.00	- —
Zinc yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	- —
bbls, c.l., works	100 lbs.	10.85	- —
bbls., l.c.l., works	100 lbs.	11.35	- —
Zinc-formaldenyde sulfoxylate, basic, 300-lb. dms., frt. alld	lb	.26	- —
Normal, 250-lb dms., frt. alld	lb.	.52	- —
Zircon (G), gran., bgs., c.l., works.	lb.	.03⅛	—
bgs., 5 tons to c.l., works	lb.	.03⅜	- —
bgs., 1 ton to 9,999-lb lots works.	lb.	.04	- —
bgs., smaller lots, works	lb.	.06½	- —
Milled, bgs., c.l., works	lb.	.04⅜	- —
bgs. 5 tons to c.l., works	lb.	.04⅝	- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝	—
bgs., 500-1,999-lb lots, works	lb.	.07½	- —
Zircon (G) in barrels 1c. higher.			
Zirconium acetate soln. 13% ZrO, dms., c.l., 30,000 lbs. min., works	lb.	.23	- —
Zirconium hydride, powd. electronic grade dms., works	lb.	14.00	-15.00
Zirconium oxide, CP, white, grd., bbls or bgs., works	lb.	1.50	- —
Zirconium oxide, electric-fused, lump, bgs., 500 to 1,999-lb. lots, works	lb.	.48½	- —
bgs., smaller lots, works	lb.	.51	- —
milled, bgs., c.l. works	lb.	.62	- —
bgs., 5-ton lots, works	lb.	.62½	- —
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½	—
bgs., 500 to 1,999-lb lots., works	lb.	.64	- —
bgs., smaller lots, works	lb.	.66	- —
Glass polishing grade, 94-97% ZrO,, bgs., works	lb.	.55	.65
Opacifier grade 85-90% ZrO,, bgs.,	lb.	.27	- .50
Stabilized oxide 91% ZrO,, milled, bgs	lb.	.62	.85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½	- —

Rosin Use Up 18 Percent—But Trouble Lies Ahead

—Continued from page 5

will not exceed 375,000 drums next season, or 390,000 drums in 1961-62.

• Further, wood rosin output, regardless of what optimists in the wood naval stores industry predict, will not exceed 1 million drums next year—and will fall to 850,000 drums in 1961-62.

• Tall oil rosin output next season: no more than 380,000 drums; in 1961-62, 415,000 drums.

• The preceding factors mean an export market dwindling from 625,000 drums this season to about 300,000 drums next season, and almost nothing in 1961-62.

Mr. Meyer predicts a possible worldwide shortage of rosin during the next two seasons, at least, owing to diminishing exports from the US. What will other countries do?

• Mexico is handicapped by government restrictions and an increasing drain on labor.

• France complains that young men are moving from the woods into industry and cannot be persuaded to return.

• Spain may increase production next season by 5 percent, and exports by 10 percent; any more substantial increase in output would call for turpentining in a part of Spain in which naval stores have not been produced before—a long-range proposition not affording immediate relief.

• Portugal may possibly increase output by 10 percent to 20 percent if needed.

• Communist countries, particularly China, will not likely increase their exports, particularly if more emphasis is placed on consumer goods for home consumption.

Hence, Mr. Meyer concludes, other countries show no indication of covering losses sustained by lack of exports from the US in the near future. Can we produce more gum rosin here? he asks. There are a few problems.

Gum Rosin Boost Required

• Gum rosin output would have to be boosted about 160 percent over the current season, by 570,000 drums within the next two seasons.

• A cash investment of about $13.8 million would be required during the next two years before any cash return from the gum is received—and this is exclusive of housing, which would about double the required outlay.

• Some 7,800 additional turpentine workers would have to go into the woods next year, and 6,000 more in 1961-62. This means an additional work force of 13,800 workers—but some of this season's output has already been lost because of the lack of labor, even at relatively high gum prices.

Efficient Methods Needed

Due to the problems outlined above, Mr. Meyer believes that more efficient and economical turpentining methods are needed in order to attract the workers and capital needed for higher output.

"Several large companies which are connected with the naval stores industry in one way or another but are not gum producers, and which have the financial resources for extensive research and large-scale production, are planning pilot gum operations for next season," Mr. Meyer reports.

"Maybe these companies will come up with the answers," he hopes. "But I wonder whether they will be coming fast enough to help us avoid a world-wide rosin shortage. Only time will tell."

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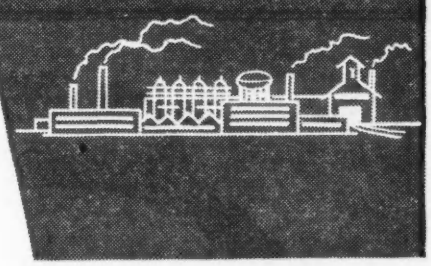

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Heavy Chemicals

Mercury broke sharply in price, yielding the $6 gain scored during the dock strike. With settlement of that strike an influx of foreign metal served to lift supply up to normal. Zinc was stronger during the week owing to firmer prices abroad and good demand here. A custom smelter posted a 1 cent advance on Wednesday and producers soon followed suit. Copper prices were firmer in the London market, but there was no change here other than an advance in the price of futures contracts and fractionally higher quotations of scrap.

Supply of copper has been turning short in world markets, but the situation is thought to be only a temporary one. Nevertheless, consumers are displaying eagerness to stock up on the metal. Most of the US copper industry remains idled by strikes, and with the close of last week, a strike in the Chilean industry was momentarily expected.

An informed source believes that the aluminum industry will continue to operate beyond November 1. Under terms of the agreement made with the steel workers union, contracts were to extend until the end of the steel strike or November 1, whichever comes first. It looks now like November 1 is going to come first, but it is felt that the union is not anxious to walk out, as the "cooling off" period in the steel strike may result in a genuine cooling off.

Invocation of the Taft-Hartley act is expected to bring some relief to markets for hydrochloric and sulfuric acids, both having been hard hit by the more than ninety days idleness of steel mills. But it's going to be a while before steel output is up to capacity, most sources agree. Meanwhile, recovery of the markets allied to steel is expected to be slow and uneven.

The American Paper and Pulp Association reported production for the week ended October 17, at 95.5 percent of theoretical capacity as compared with the revised figure of 98.3 percent for the previous week and 92.1 percent for the corresponding week of last year.

Price Trends

Advanced
Zinc, 1c. per lb.

Reduced
Mercury, $6 per flk.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Oct. 24, 1958
107.01	107.16	107.10	103.53

For Current Prices see page 10

Acids

The following preliminary figures, compiled by the Bureau of Census, report production of specified acids in tons.

	August	*July*
Hydrochloric	89,897	86,574
Nitric	241,848	233,412
Phosphoric	154,062	140,312
Sulfuric (gross)	1,310,875	1,365,098

Hydrochloric—Invocation of Taft-Hartley in the steel strike will bring some relief to this market. And the relief, trade sources agree, is long overdue, with more than 90 days having elapsed since start of the strike.

Some sources take a dimmer view of the whole affair. They feel that a certain amount of damage has been done to business that will not be repaired by resumption of steel production, that may, in fact, take quite a few months to repair. These sources believe that the chance of a fourth-quarter boom has just about been erased. Only a settlement of the strike during the early days of the injunction period will enable the economy to regain any vigor during the remaining two months of the year, they feel.

For one thing, supply of iron ore will be hard to come by because of transportation difficulties at this time of the year. And furnaces will probably need extensive repair before full capacity production can be attained. It is thought that unless management and labor reconcile their differences, the cooperation necessary to surmount these troubles will not be all that it should be.

Sulfuric—American Iron and Steel Institute has estimated steel output for the week just ended at 371,000 net tons, or 13.1 percent of capacity, as compared with an actual total of 368,000 tons, or 13.0 percent capacity for the preceding week. During the corresponding week of last year, output totaled 2,026,000 tons, the report noted.

Bases and Salts

Caustic Soda—Buying interest has been well sustained, with prices unchanged at long established levels. Supply is amply available.

Chlorine—Active call from the rayon industry has kept the chlorine market in good shape, according to reports from the trade. Outlook for the balance of the year is good with no downturn expected until the final weeks of December, when consumers will most likely trim inventories.

The following preliminary figures, compiled by the Bureau of Census, report production of specified chemicals in tons:

	August	*July*
Calcium carbide	81,392	*88,479
Caustic soda, all processes	398,723	394,707
Chlorine gas	363,980	359,175
Soda ash, syn	423,843	419,654
Nat.	57,900	64,148

* Revised.

Sodium Borohydride — A substantial price reduction was recently reported for large-quantity shipments. Lots of 5,000 or more pounds are now priced at $19.90, or $13 less than the old price for that quantity bracket.

Smaller shipments continue at the old range of $33 to $34, which formerly applied to all brackets. The reduction was made possible by expanded production.

Sulfur—The following figures, compiled by the Bureau of Mines, show production and shipments of sulfur during specified periods:

	August	*July*
Native production	318,192	368,561
Shipments	432,924	446,574
Sales*	409,478	480,290
Stocks†	3,987,521	3,875,792
Recovered production	53,543	54,169
Shipments	56,901	58,604
Sales*	56,521	57,760
Stocks†	159,933	156,342

* Calculated from production and change in stocks during the period.
† Products' stocks at mines or plants in transit, and in warehouse at end of period.

The following figures, compiled by the Bureau of Mines, show imports of Canadian and Mexican sulfur into the United States during specified periods in long tons.

Long tons	*August*	*July*
Ore	214	65
In any form	51,382	61,047
Total	51,596	61,112
Dollar Value		
Ore	$5,131	$1,528
In any form	$1,094,282	$1,274,024
Total	$1,099,413	$1,275,552

Nonferrous Metals

Aluminum—Shipments of 168,205 short tons were reported for September, down only a shade from the previous month's 172,817 tons. The latest figure brought the yearly total through September to 1,462,615 tons, as compared with 1,132,457 in the same period of last year.

According to the Aluminum Association, the all time record total for a single month was scored this July with 179,194 tons. The record quarterly output was established in the third quarter of this year at 520,216 tons.

A report from Business and Defense Services Administration points to an upswing in world trade of aluminum during 1958 after a slight reversal the previous year. Crude exports by the non-Communist countries were reported at 832,000 short tons, up 24 percent from 1957.

Semifabricated aluminum exports were up about 11 percent to a level of 191,000 short tons, the report noted.

Canada continued as the major exporter of crude aluminum, but it took only 58 percent of the market, as against 71 percent the year before. Norway, France and the United States, among other coun-

Heavy Chemicals

tries, increased their share of the market at Canada's expense.

Lead—Price was steady against light buying interest.

Domestic mine output of lead in the first eight months amounted to 169,650 tons, a six percent decline from the 180,406 tons mined in the corresponding period of last year. But comparable data on Canadian exports showed an advance to 107,840 from 87,904 tons.

Mercury—Stepped-up shipments from abroad softened prices to a range of $224 to $227 per flask on large lots, a decline of $6.

Manganese—Domestic mine shipments of manganese ore in June increased 68 percent over May to 26,000 short tons, Bureau of Mines has reported. The Bureau tabbed shipments of manganiferous and ferruginous ore at 136,000 short tons.

In a report from the Census Bureau, imports of manganese ore containing 35 percent or more manganese were listed at 211,575 short tons, an increase of five percent over May. Of the total volume, Brazil supplied 28 percent, Ghana 25 percent, India, 20 percent, and Mexico 16 percent, the remaining 11 percent supplied by a number of countries.

Imports of ferromanganese totaled 25,864 short tons of ore equivalent, a decrease of four percent from May.

Platinum—Prices have been long unchanged at a range of $76 to $80. Most sales last week took place at $77.

Sales of platinum-group metals in the United States totaled 182,000 ounces during the second quarter, according to the Bureau of Mines. This was a decline of 17 percent from the first quarter but a sharp advance of 49 percent ahead of the corresponding period of last year. Sales were lower for all metals except rhodium.

Imports of the platinum group were reported 42 percent below those of the preceding quarter, but 65 percent above those of the corresponding period of last year.

According to the Mines Bureau report, sales of platinum in the second quarter declined 23 percent from the first quarter, with declines reported in all end-uses except electrical, which advanced 41 percent over the preceding quarter.

Palladium sales, the Bureau said, were off 12 percent, only the jewelry industry showing an increase, and that a small one.

Sales of iridium, osmium, rhodium and ruthenium together aggregated 98,000 ounces, a drop of 14 percent from the level of the first quarter. A gain of 21 percent in sales of rhodium failed to offset declines in the other metals.

Refinery output of the group, including new and secondary, dropped 19 percent during the quarter to 45,000 ounces. A four percent decline in stocks was attributed chiefly to a decline in platinum stocks.

Zinc—Brisk demand drove prices up 1c. to 13c., E. St. Louis and 13½c., New York. Consumers covered their needs ahead of the advance, which took place on Wednesday, and thereafter sales declined steeply.

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All these solvents are completely miscible with acetone, benzol, butanol, carbon tetrachloride, diethyl ether, ethylene dichloride, linseed oil, methanol, petroleum ether, and Solvesso No. 2.

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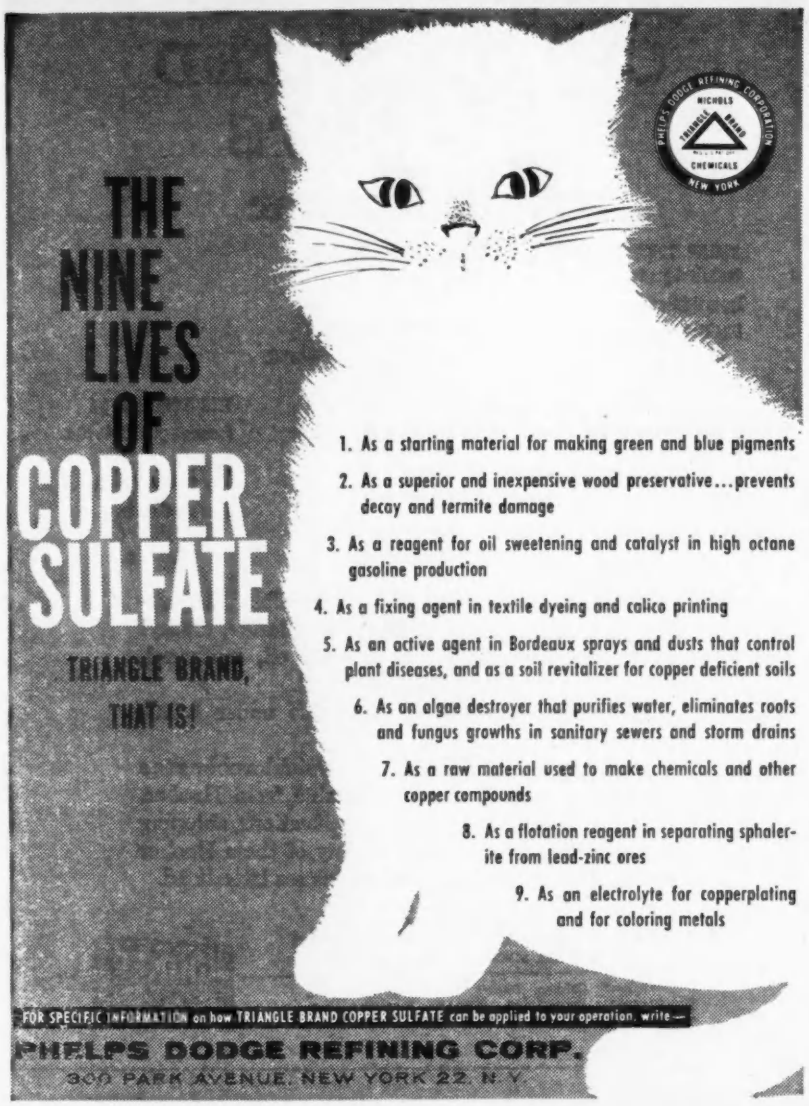
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Tung Nut Production Cut In Prospect for Next Year

Individual producers of tung nuts may have to reduce their production in 1960 by 20 percent to avoid the $50,000 limitation on no-recourse price supports contained in the agricultural appropriations act passed by congress last session.

Tung nuts were among a half-dozen commodities determined to be in surplus supply for purposes of the limitation announced last week by the Department of Agriculture.

Crude pine gum and honey were two products listed by the department at the same time to be not in surplus supply for this purpose.

While announcing that tung nuts are surplus and subject to the limitation, USDA said that it will state later just how the 20 percent cutback will be brought about. Because tung nuts are a tree crop for which price supports are mandatory under the law, the department will have to make a special determination of the method for effectuating the 20 percent reduction in output.

The non-recourse price support limitation applies to individual producers of products declared by the Secretary of Agriculture to be in surplus supply and was written into the law by congress in an effort to avoid big benefit payments to farm producers.

Carbide Is Weighing

—*Continued from page 3*

large-scale production installation to be located at the Institute plant.

"In order to meet the demands of the 1961 crop year, such a new plant would have to be in operation in the fall of 1960."

Though Linde Company, another division of the corporation, has long been shipping great quantities of oxygen to Cape Canaveral and the west coast missiles center, Mr. Fogle is the first top Carbide official to state publicly that the company has been interested in rocket fuels. Here's what he has to say:

"We have completed our analysis of needs for both military and space vehicles. We are now turning our attention to the synthesis of promising materials. Some of the most attractive possibilities of rocket fuels are based on materials produced by Union Carbide."

Though he doesn't say, Mr. Fogle could be thinking of, among other things, Carbide's epoxy resins—which are reported to be very pomising as binders in missile fuels.

Mr. Fogle on ethylene oxide:

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FMC to Build Equipment For Solid-Fueled Missile

Food Machinery & Chemical Corporation, San Jose, Calif., has been named to build the ground support equipment for Boeing Airplane Company's new solid-fueled BOMARC missile.

Contract for the job went to FMC through competitive bidding, after the company had completed engineering and prototype development work for Boeing on launcher-erector and power pack unit portions of the new missile's ground support system.

Work on the new contract, scheduled to run through 1960, will be handled by FMC's ordnance division in San Jose. The division has previously built ground support equipment for the liquid-fueled BOMARC, which is just now being replaced by the solid-fueled variety.

The BOMARC is a supersonic, long-range interceptor missile, designed as a defensive weapon for densely-populated areas.

Carbide Opens

—*Continued from page 5*

subsequent engineering and design of commercial production facilities.

The technical center now includes three major buildings for the research, development and engineering departments; two high-pressure laboratories with a total of thirty-nine test cells; one chemical and two plastics/resins pilot plants; applications research laboratory; radiation laboratory; cafeteria, and supporting facilities.

According to Union Carbide Chemicals, its new diepoxides, and others planned for the future, have already demonstrated properties that will make them of outstanding importance in the epoxy resin field for plastics, coatings and adhesives.

Advantages of New Epoxides

With low-cost anhydride hardeners, "Epoxide-201" forms resins with heat-distortion temperatures above 300 degrees Fahrenheit, says Carbide. Epoxy plastics based on "Epoxide-207" reportedly can withstand temperatures in excess of 570 degrees Fahrenheit.

The lowest viscosity diepoxide now commercially available is "Epoxide-206." Its viscosity is almost as low as that of water. Used as a reactive diluent for conventional epoxy resins, 10 percent of "Epoxide-206" in the resin is claimed to reduce the overall resin viscosity from 19,500 to 4,300 centipoises at 23 degrees Centigrade.

"Flexol" plasticizer EPO has high oxirane oxygen content and low unsaturation. It imparts long-term compatibility, stabilizing action and resistance to color development and rancidity.

Polymerization of *epsilon*-caprolactone is the basis of a variety of viscous liquid polysters that are said to hold promise for the manufacture of urethane elastomers.

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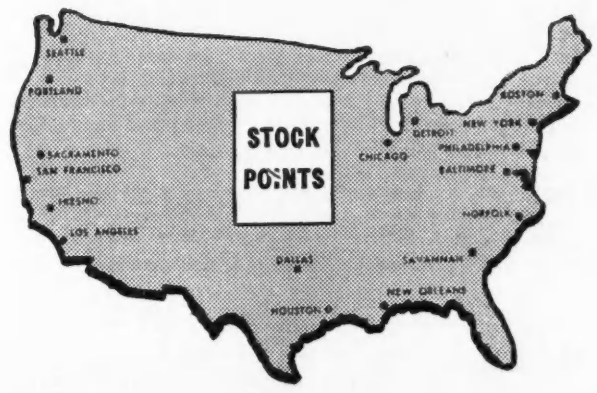

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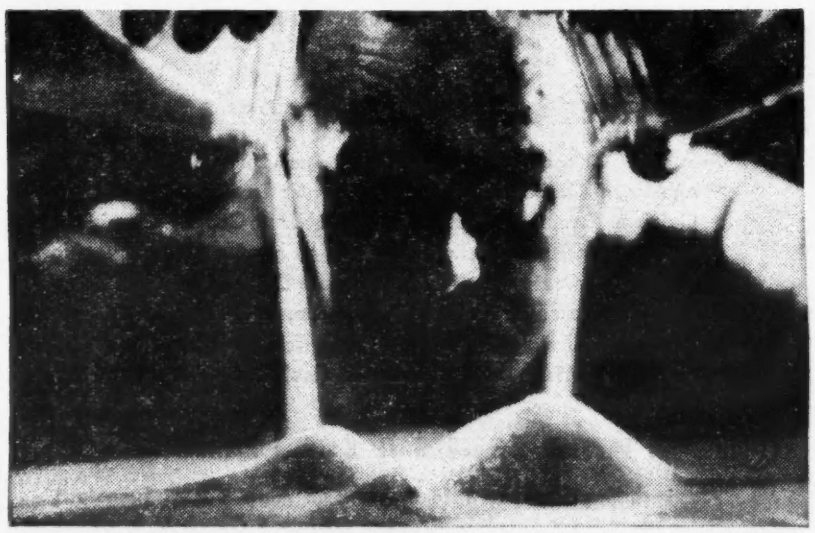

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HOOKER CHEMICALS PLASTICS

Data Offered

U. S. Industrial Chemicals Company, New York, a division of National Distillers & Chemical Corporation, describes a process for converting **metallic sodium** into wire in a technical data sheet entitled "Laboratory Production and Use of Sodium Wire." Included are scale drawings of equipment, data on typical yields, and a description of a typical reaction. Copies are available from U. S. I.'s office at 99 Park avenue, New York 16.

Titanium Metals Corporation of America, New York, has a handbook outlining corrosion-resistant properties of **titanium metal** and describing its design and fabrication characteristics. The thirty-six-page "Titanium Metals Handbook for the Chemical Processor" covers the metal's behavior in some 200 corrosion environments. Among the material included are case history data, titanium metal weight tables, and size ranges of titanium mill products. Copies may be obtained by writing to the company at 233 Broadway, New York 7, N. Y.

Badger Manufacturing Company, Cambridge, Mass., has issued an eight-page brochure giving highlights on the plant recently constructed for Atlantic Refining Company. The plant is rated to produce 216 million pounds of low oil content **paraffin** wax annually from feed stocks. The brochure includes a flow chart, description and photographs of the production process, together with engineering and construction details. For copies of "Atlantic—The Story Behind One of the World's Largest Paraffin Wax Plants," write Badger at 230 Bent street, Cambridge, Mass.

Industrial Bureau of the Atlanta Chamber of Commerce has just issued the 1959 edition of "Facts and Figures About Atlanta," a little **compendium on the southern market**, with the accent on Atlanta. The subject matter is grouped under fifty main headings, with numerous graphs and charts included. Copies are available without charge.

Morgantown's Up Again

—Continued from page 5

Nemours & Co. and is one of three such plants erected for the government during the war.

The project is located on the Monongahela river, one and one-half miles outside Morgantown, and about 80 miles south of Pittsburgh.

The chemical plant is situated on 750 acres and is comprised of twenty-nine buildings with a total area of 474,350 square feet. The coke plant is located on thirty-five acres and has eight buildings with 10,000 square feet.

The chemical production facilities consist of a water-gas plant, a synthesis plant for ammonia and/or methanol, a methanol purification unit, a hexamethylene plant, an ethylene diamine plant, and a formaldehyde plant.

The facilities are capable of refining methanol at the rate of 120,000 gallons daily. The formaldehyde plant has a designed capacity of 5,200,000 pounds a month; the hexamethylenetetramine facilities, 130,000 pounds daily; the ethylene diamine facilities 190,000 pounds a month of refined and 50,000 pounds of polyamines.

Also Higher Alcohols Facilities

There are also facilities to produce over 700,000 gallons monthly of higher alcohols.

The government has an investment of $64 million in the project. From the time it was built until August, 1945, it was operated for the military by duPont. From August, 1946, until May, 1949, it was operated by the old Heyden Chemical Corporation; from October, 1951, to November, 1958, it was under lease to Olin-Mathieson.

The plant was declared surplus by GSA in May, 1958, and in December GSA offered it for sale or lease under bids for opening March 19, 1959. No bids were offered.

It is now up to the industrial real estate brokers to see if they can get rid of it.

Soviets Report Development Of Live Virus Flu Vaccine

The Soviet Union has developed an effective live virus vaccine to control influenza.

In a report to the American Public Health Association, a Russian scientist said that the vaccine is now being administered to 20 million people a year in the USSR. It is claimed to be the "only possible practical method of mass prevention of influenza."

Development of a successful vaccine to control mumps was also disclosed. According to the report, 12 million Russian children a year have now been immunized against polio with live vaccine of the type developed by Dr. Albert Sabin of Cincinnati, Ohio.

Cyanamid in Last Lap

—Continued from page 7

Brooklyn, N.Y., which will present the second and final phase of its defense.

Hearing Commissioner Robert L. Piper estimated that Bristol Laboratories would come up to bat about November 12, to be followed by Upjohn Company, Kalamazoo, Mich., and E. R. Squibb & Sons Divi-Division of Olin Mathieson Chemical Corporation—in that order.

Last week's hearing was highlighted by testimony of Cyanamid scientist Joseph G. Niedercorn, who corroborated the testimony given a week earlier by his laboratory assistant, Mrs. Edna Doeer. She had previously testified that Cyanamid's chlortetracycline patent, drawn up by Mr. Niedercorn some ten years ago, contains an error.

Though not considered to have much chemical significance, this error, in the form of a misplaced decimal point, is thought to have considerable bearing on the present case. This was well testified to by government efforts to discredit Mrs. Doerr's testimony or have it stricken from the record (OPD, 10/19/59).

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Obituaries

George H. Halpin

George H. Halpin, vice-chairman of the executive committee of Minnesota Mining & Manufacturing Company, St. Paul, Minn., died October 20 in Minneapolis. He was sixty-nine years old.

Mr. Halpin's service with 3M dated from 1930, the year the company acquired Baeder Adamson & Co., where he was vice-president, sales manager and director. He became sales manager of the parent company and, eight years later, a vice-president and general sales manager. He was elected to the board of directors in 1939.

In 1949 Mr. Halpin became executive vice-president in charge of sales, and in 1955 executive vice-president.

Louis Waldbauer

Louis Waldbauer, supervisor of the analytical research laboratory of General Aniline & Film Corporation's Rensselaer, N. Y., plant died October 20 in Albany, N. Y. He was sixty-three years old.

Dr. Waldbauer was previously a research chemist with E. I. duPont de Nemours & Co., Wilmington, Del. He had taught at the University of Maine, McGill University, Lehigh University and the State University of Iowa.

Kenneth B. Bolton, a sales representative for Titanium Pigment Corporation, N. Y., since 1936, died September 12 in Cleveland, Ohio.

James A. Cashen, jr., retired manager of wholesale sales for American Oil Company, New York, died October 20 in Hudson, N. Y. He was sixty-one years old. Since his retirement in 1956 Mr. Cashen had continued in the oil business as a broker and consultant.

Dr. Ernest W. Dean, former vice-chairman of the products committee of Standard Oil Company (New Jersey) died October 16 in Westfield, N. J. He was seventy-one years old.

Mr. Dean retired six years ago. Before his appointment to Standard's products committee he had been director of the inspections laboratory of the Esso Research & Engineering Company in New York.

Charles F. Gaetjens, retired president of Gaetjens, Berger & Wirth, Inc., Brooklyn, N. Y., died October 18 in Oradell, N. J. He was eighty-three years old.

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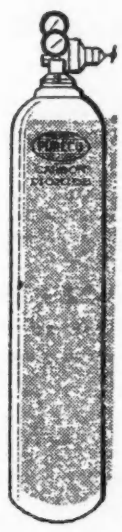

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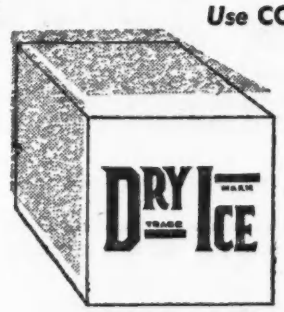

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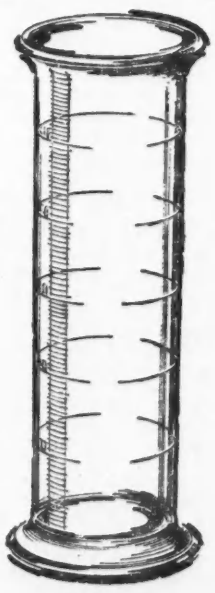

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Agricultural Chemicals

Producers of synthetic ammonium sulfate are turning away customers these days and they'll likely continue to do so in months ahead. One leading maker reports that it has already committed scheduled production for the next eight months (through July 1, 1960), while others, less explicit about forward bookings, admit to being pretty much "sold up." Factor behind this tight supply situation is, of course, the prolonged steel strike and the consequent non-availability of byproduct sulfate, which in normal times supplies about half of the overall market.

Shortage of ammonium sulfate here will probably see imports of the chemical rise sharply in coming months. According to trade reports, both West Germany and Japan have plenty of material on hand. In fact, Japan appears to be pushing urea, holding onto its sulfate—possibly waiting for the right moment and the best price before offering the latter either on the US west coast or in Korea, frequently the destination of a goodly percentage of domestically produced fertilizer materials.

Two price changes are coming up November 1. The one, a $1 per ton increase for ammonium nitrate which will bring the listing to $66 per ton; the other—also a seasonal adjustment—a $2.75 to $3.15 per ton (depending upon phosphorous content) increase for calcium phosphate dibasic.

A prominent and well-diversified US firm obviously has high hopes for the agricultural chemicals industry, specifically the ammonia-ammonium sulfate segment of the business. Recently it announced the signing of a "management" contract with a Puerto Rican company, currently producing these chemicals, that is likely to be a prelude to at least partial ownership. Commenting on this development, trade sources said that the firm is obviously now a dominant factor in the Caribbean fertilizer market—one, incidentally, that is expanding quite rapidly.

Ammonium Sulfate—Spokesman for a leading agricultural chemicals producer reports that the firm has contracted with both domestic and foreign buyers for all of its scheduled ammonium sulfate output from now through July 1, 1960. While other firms were not quite as explicit about future commitments, most admitted that they also were pretty well "sold up."

Thus, with a tight supply situation inescapable during the coming season, domestic prices are likely to show a great deal of strength. But not so, export prices, according to recent trade reports. It's pointed out that both Germany and Japan have sizable amounts of ammonium sulfate on hand and that the Asia-Korea markets, particularly, are likely to be more than routinely competitive.

It appears that the Japanese have been concentrating on urea sales and holding off on ammonium sulfate, a situation that suggests the Japanese, knowledgeable about the steel strike, are waiting till the last possible moment to pounce on poorly-supplied markets.

Animal Proteins—Fishmeal and fish-scrap prices at both Atlantic and Gulf ports last week were reported to be, respectively, $118-$122 and $114-$118 per ton, packed in 100-pound bags for prompt shipment. Demand was described as moderate, supplies heavy. Contributing most significantly to this inbalance, was the overproduced poultry industry, largest single market for the meal.

Approximately two more weeks remain before the fishing season is over on the Atlantic coast. Two centers in North Carolina will, of course, remain in operation until mid-December.

Production of fishmeal, January through July, 1959, amounted to 144,865 tons. This was 36 percent greater than that in the first seven months of 1958.

Imports through July totaled 105,724 tons, 52 percent higher than the figure for the corresponding period a year earlier. However, monthly receipts since April have shown a steady decline, Interior's US Fish and Wildlife Service reports.

Calcium Phosphate Dibasic—Production of calcium phosphate dibasic (100 percent $CaHPO_4$) in July amounted to 23,156 tons, appreciably above output for both June (20,194) and July, 1958 (18,149). But despite this rise in production, stocks at July's end, totaling 6,817 tons, were better than 2,000 tons smaller than those held thirty days earlier.

Two producers of 18½ percent grade dicalcium phosphate are set to advance prices November 1, in line with schedules issued by competitors at the beginning of the quarter. Increases will range from $2.75 to $3.15 a ton depending on phosphorous content.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 24, 1958
110.52	110.52	110.14	110.06

For Current Prices see page 10

Potash — French potash producers, through their US representatives, plan to offer an agricultural grade of bicarbonate of potash here this coming season. While unsure of the size of the potential market, they are certain that they have got a relatively quick, economical production process.

Newly-developed by the French, the process involves the manufacture of bicarbonate directly from the muriate, thereby eliminating a substantial part of the cost and time required by the standard conversion procedure. It will thus permit the French to offer the material at fairly attractive prices. Expected schedule: $42 to $44 a ton.

Besides the agricultural grade of bicarbonate of potash, the French plan to market an industrial grade as well as carbonate of potash. Prices for these last items have not yet been determined—at least for publication—but it's likely that levels will be appreciably lower than going prices currently.

The Interior department recently announced an increase in the allowable potash lease acreage. New limit was set at 25,600 acres in a single mining unit, equal to the total previously allowed in two separate units.

Miners' former fear of competition by the opening to development of new areas has been shown to be unfoundled, an Interior spokesman said. Also noted was the fact that since 1931, when the Carlsbad, N. Mex., field was opened, the average production per mining until in the state has increased despite the opening of several new mines.

Pesticides

DDT—The price schedule for DDT, advanced 1 cent a pound October 1, is firm at 23c. a pound for flake material in bags, at 24c. a pound for the powder.

General Services Administration is expected to place orders for from forty-five to sixty million pounds of wettable powder sometime this fall.

Herbicides—Bedstraw, a weed threatening birdsfoot trefoil pastures in the northeastern states, is being controlled experimentally by the use of "Silvex," a new herbicide, the Agriculture department reports.

Resistant to 2,4-D and 2,4,5-T (which are customarily used to hold back the spread of weeks in pastures, some crops, along ditch banks and roadsides), bedstraw was controlled in test plots of birdsfoot trefoil by one overall spray of "Silvex"—2-(2,4,5-trichlorophenoxy) propionic acid—followed by spot treatment of surviving plants.

Although the first harvest of birdsfoot trefoil was reduced by the herbicide, normal yields were obtained in subsequent cuttings, USDA said.

Most efficient control of the weed was obtained by spraying, during the early stages of growth in the spring, 2 pounds per acre of "Silvex" ester, or 4 pounds in amine salt form. Each chemical for the overall spray was applied in 30 gallons of water per acre with tractor-drawn equipment.

Malathion—Malathion emulsion sprays are superior to methoxychlor dusts in protecting shelled corn stored in the Southeast from insect attack. This was concluded by USDA following field tests conducted by its Agricultural Marketing Service on various dosages of malathion emulsion sprays and methoxchlor dusts used as protective treatments against insect infestations.

Petroleum Derivatives

The shortage of benzene is becoming somewhat more acute and more general. While price patterns on the great bulk of material moving under contract are held at around 31 cents per gallon, the bulk of spot sales volume looks to a higher level in the range of 36 to 40 cents per gallon. As for other aromatic solvents, there is no shortage and no price pressure in an upward direction. In fact, any price pressures that exist, or will exist in the weeks immediately ahead, on blended aromatics are apt to be downward because of the abundance of supply together with declining demand. Enough metal fabricating firms, as well as the appliance and automotive industries are running out of steel, to significantly curtail industrial finishing operations which use aromatic solvents either in paint products or for thinning and spray paint applications.

This effect on solvents is beginning to be felt this week. It will get a lot worse before it gets better.

The amount of domestic crude oil that will be consumed or exported in November, 1959, is estimated by the Bureau of Mines, United States Department of the Interior at 3,900,000 barrels daily, compared with 6,800,000 barrels forecast for October, 1959. The forecast contains no recommendations as to desirable rates of crude production or of changes in crude stocks. It is an estimate of probable consumption based on actual industry conditions and policies in effect; adjustment for seasonal changes in refined stocks; allowances for the current rate of imports of crude oil and products; and the production of natural-gas liquids. The forecast includes estimates of a total gasoline demand of 4,020,000 barrels daily in November, a gasoline yield of 45.0 percent, and total crude runs of 7,800,000 barrels daily.

Aromatic Solvents

Benzene—The market is tight on benzene and has reached that point of scarcity where material bought on spot is in most quarters moving in the range of 36 to 40 cents per gallon. However, by far the largest volume of domestic production continues to move under contract at 31 cents per gallon.

The important difference between last week and a couple of weeks ago is that the higher price level mentioned above for non-contract raw material benzene is no longer confined to benzene stemming from one or two smaller firms, but is becoming more general.

No significant relief from the acute supply position on raw material benzene is expected until after the steel industry has been operating for two or three weeks under Taft-Hartley injunction. Then some temporary relief is expected from cokeoven output. However, if steel operations are not sustained through strike settlement, but close down after 80 days of operation under injunction, there will not be enough relief to fill all the pipelines even once.

Aliphatic Solvents

Current Group 3 prices on the major aliphatic organic solvents are as follows: Mineral spirits, 12.875 cents per gallon; Stoddard solvent, 13.375 cents per gallon; rubber solvent, 13.875 cents per gallon; cleaner's naphtha, 13.875 cents per gallon; VM&P naphtha, 13.875 cents per gallon; lacquer diluent of the benzol type, 15.125 cents per gallon, and lacquer diluent of the toluol type, 14.375 cents per gallon.

Cleaners Naphtha — Indications are that the Fall drycleaning hump which annually appears in the sales curve, is about over. It would seem that most people have already gotten their Winter clothing dry cleaned, as the abnormal demand for dry cleaning solvent has begun to slope toward normal again.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Oct. 24, 1958
103.04	103.04	103.04	104.54

For Current Prices see page 10

LPG's

Butane—The API reported production of butane for the last two weeks of September, 1958, as amounting to 75,428,000 gallons, with production during the comparable period of 1959 increased to 78,422,000 gallons. Meanwhile the output of butane from refinery gas during the September 16-30 period amounted to 21,538,000 gallons in 1958 as against the 29,259,000 gallons turned out in the same period of 1959.

Ethane and Ethylene—Output from LPG production during the September 16-30 period was 22,541,000 gallons while the output from LRG amounted to 12,250,000 gallons.

Isobutane—API reports indicate that production of this gas from LPG amounted to 25,019,000 gallons during the last two weeks of September, as against 20,411,000 gallons during the corresponding period of last year.

Propane—Output from LPG was reported by API for the period of September 16-30 as amounting to 143,021,000 gallons, compared with 138,776,000 gallons during the same period of 1958. Production of propane from LRG for the corresponding periods were 70,676,000 gallons in 1959 and 62,190,000 gallons in 1958.

Miscellaneous

Crude Oil—According to the American Petroleum Institute, for the week ended October 9, reports received from refining companies indicate that the industry as a whole ran to stills on a Bureau of Mines basis approximately 7,688,000 barrels of crude oil daily and produced 27,625,000 barrels of gasoline; 1,971,000 of kerosene; 12,612,000 of distillate fuel oil and 5,537,000 of residual fuel oil during the week; and had in storage 177,613,000 barrels of finished and unfinished gasoline; 32,814,000 of kerosene, 177,670,000 of distillate fuel oil and 59,040,000 of residual fuel oil on October 9, 1959.

The Bureau of Mines states that current reports of the industry for the week ended October 9, 1959, indicate a decrease in crude-oil production and an increase in crude runs. According to the API, the daily average output of crude (including lease condensate) was 6,812,000 barrels, a decrease of 13,000 barrels from the preceding week. Daily average crude runs to stills of 7,688,000 barrels were 70,000 barrels above the preceding week, and 35,000 below the week ended October 10, 1958. Runs of foreign crude amounted to 1,026,000 barrels daily, compared with 973,000 barrels in the preceding week. For the four-week period ending October 9, crude oil production averaged 6,830,000 barrels daily, and crude runs to stills averaged 7,756,000 barrels daily with runs of foreign crude averaging 977,000 barrels daily.

Natural Gas—According to the Bureau of Mines, the daily average production of natural gas liquids in July was 35 million gallons, 2 percent below June, 1959, according to the Bureau of Mines, United States Department of the Interior. The daily average production of liquefied gases at refineries was 8 million gallons, the same as in June, 1959.

The daily average demand for liquefied gases for fuel and chemical uses decreased 1 percent from June, 1959. Stocks of liquefied gases totaled 1,126 million gallons, 306 million gallons above a year ago. Underground stocks of liquefied gases totaled 971 million gallons, an increase of 102 million gallons from June, 1959.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended Oct. 10 totaled 250,923,000 barrels according to data reported by the Bureau of Mines. Compared with the total of 251,249,000 barrels the preceding week, this represents a decrease of 326,000 barrels comprising a decrease of 298,000 barrels in stocks of domestic crude and a decrease of 28,000 barrels in stocks of foreign crude.

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Aliphatic Organics

Aliphatic organic chemicals markets were quiet last week so far as price fluctuations were concerned. As reported two weeks ago, glacial acrylic acid declined 7 cents per pound across the board, and recent weeks have seen increases of 20 cents per cwt. in sucrose and hydrated and anhydrous dextrose due to stronger raw sugar prices. Buyers of glycerine were coming into the market for next month's requirements after having bought heavily in anticipation of the price advance effective October 1. The advance amounted to 1½ to 1¾ cents per pound as to quantity.

Alkyd resins and phthalates markets have been slowed due to a shortage of phthalic anhydride which in turn depends on the amount of naphthalene turned out from steel mill operations. Among the aliphatic chemicals which go into alkyds are pentaerythritol and glycerine, and in plasticizers, 2-ethylhexyl alcohol.

A major chemical producer announced that a new plant for the production of methylamines would be built at Belle, W. Va. The firm, which currently manufactures these materials at Houston, Texas, will use methanol and ammonia already produced at the Belle site, to turn out dimethylformamide, dimethylacetamide and dimethyamide. Current industry capacity to produce methylamines is estimated at about 54 million pounds.

The volume of alcohols moving into some markets this month is not generally as high as had been expected, but trade observers still do not feel that this is a result of the steel strike. However, a shortage of steel drums has been gradually making itself felt.

The Association of Soap and Glycerine Producers reported total production of ethylene and propylene glycols and pentaerythritol in July was 113.1 million pounds as against 100.6 million in the previous month. Output of these glycerine substitutes in the first seven months of this year amounted to 721.5 million pounds.

Acetone—Chemical and solvent use continues fairly well maintained. Acetone along with other ketone solvents such as MEK and MIBK continue to find use in nitrocellulose, vinyl and epoxy finishes. Among newer coatings, acrylic lacquer systems have also made use of these standard solvents.

Acrylic Acid—As reported two weeks ago, glacial acrylic acid was reduced 7c. per pound across the board.

Under new schedules, carload or truckload of drums is 57c. per pound; less carload drum lots, 58c. per pound; 13-gallon carboy to 1-gallon container, 63c. to 93c. per pound as to quantity. Prices are f.o.b., works, frt. allwd.

Acrylic acid has found use in the production of industrially-important products which are formed when acrylic acid is polymerized or copolymerized with other monomers or used as an intermediate. Applications include adhesives, laminating resins, solvent and emulsion coatings, photographic chemicals, elastomers, ion-exchange resins, and polymer emulsions for textile, leather and paper finishing. Many of the applications of acrylic acid stem from its ability to add carboxyl groups to polymer chains when it is copolymerized with other monomers.

Acrylonitrile—Production has continued to move up as a result of more favorable conditions in the textile and rubber industries. Output for this year is expected to be about 230 million pounds against 180 million last year. Capacity is fully adequate. Running at peak capacity, it is estimated that producers could turn out slightly better than 300 million pounds per year.

Synthetic fibers will continue to provide a growing market for acrylonitrile, making up more than half the market, while use of acrylonitrile copolymers in plastics and rubber industries account for an additional 25 percent.

Expansions in the works, include a plant at Beaumont, Texas, which will utilize propylene and ammonia as raw material, and a unit at Memphis, Tenn., which will use acetylene and hydrogen cyanide. Output of the Beaumont unit, slated for completion in the spring of 1961, is expected to be entirely for captive use in the production of the synthetic acrylic fiber, "Orlon."

Butadiene—Capacity for the production of styrene-butadiene latices will be increased by a producer, according to report of last week. The company will build a plant for production of the latices at Allyn's Point, Conn., and will expand existing facilities at Freeport, Texas. Production from the Conn. facility is scheduled for the first part of 1961.

Among cyclic elastomers, polybutadiene-styrene (S-type) synthetic rubber is most extensively used. Consumption in the first eight months of 1959 amounted to about 580 thousand long tons as against a total consumption last year of 730 thousand long tons, according to report of Bureau of Census and Business and Defense Services Administration.

Dextrose—The market was unchanged and steady at previously reported levels. The last price change in this market occurred two weeks ago, when hydrated and anhydrous dextrose were boosted 20c. per cwt. at most points. The advances followed a similar increase in the price of sucrose and advances in the price of raw sugar.

Demand has remained steady, but sellers noted a lack of urgency which was evident prior to the short-lived dock strike.

Dimethylformamide — Tankcar and tanktruck price is 30c. per pound, f.o.b., works; carload or truckload lots in drums, 32½c. per pound; less carload drums prices range from 33c. to 34c. per pound as to quantity.

A producer announced expansion plans for methylamines last week. A new

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 24, 1958
132.98	132.98	130.42	130.73

For Current Prices see page 10

Organic Chemicals Output: August

The following figures, in pounds, represent output of specified organic chemicals in July and August, 1959, as reported by the Tariff Commission.

	August	*July*
Acetic Acid:		
Synthetic	56,800,912	53,346,438
Natural (wood distillation)	**	**
Acetic anhydride	93,860,123	92,679,201
Acetone	67,386,779	63,756,815
Acrylonitrile	16,368,622	20,318,845
1,3-Butadiene (rubber grade)	157,878,104	157,592,345
Carbon disulfide	51,104,658	42,398,033
Carbon tetrachloride	31,745,382	25,736,426
Ethanolamines (mono-, di-, and tri)	9,634,563	11,019,290
Ethyl acetate (85 percent)	7,923,359	7,247,664
Ethylene glycol	96,409,644	91,955,879
Formaldehyde (37 percent by weight)	148,129,112	126,514,867
Methanol:		
Synthetic	150,722,725	147,841,723
Natural (wood distillation)	**	**
Pentaerythritol	5,031,500	5,448,662
Perchloroethylene	15,403,314	16,508,440
Propylene glycol	**	15,722,262
Trichloroethylene	26,303,352	29,459,418

** Data not reported.

Aliphatic Organics

plant will be built at Belle, W. Va., for the production of dimethylamine, dimethylformamide, and dimethylacetamide. DMF finds its principal outlet as a spinning solvent in the production of acrylic fibers.

Formaldehyde—As one of the work horses of the chemical industry, this material has continued to make possible the production of an ever-widening variety of plastics and resins.

October sales have been fairly well maintained and, in some quarters, are expected to exceed projections. A slight dip last month was interpreted as meaning that consumers were becoming a little unsettled by the lengthening steel strike. However, reports thus far this month have failed to continue in the same vein. Consumers have come through with the usual amount of business and producers are meeting their production schedules.

Ethanol—Prices were unchanged at levels in effect for more than a year. The last price change in this market was in October, 1958, when prices on most grades were advanced 5c. per gallon.

A steady price pattern on ethanol was expected to hold in the months ahead. The advance of last year did little more than take some of the strain off producers pressured by substantial increases in manufacturing and labor costs.

Solvent and chemical demand has been well maintained despite a growing concern on the part of chemical men that the steel strike would eventually form enough of a drag to weigh down the entire industrial machine.

2-Ethylhexanol—Market has been depressed as a result of shortages of raw material used in the production of alkyds. The end of the steel strike was expected to bring some alleviation.

Glycerine—There were signs of increased activity for next month's requirements, sources said. A lull has been reported in buying during the past few weeks as consumers stocked heavily to beat an October 1 price advance.

The alkyd resins outlet has been hampered by shortages of raw material, phthalic anhydride, which in turn can be traced to a shortage of naphthalene from steel operations.

Methanol—A major producer recently announced a substantial expansion in production capacity at the firm's Sterlington, La., works. Included in the stepped up methanol production will be increased capacity for mono-, di-, and trimethylamines at Terre Haute, Ind.

Methanol capacity at Sterlington has been put at about 43 million gallons a year and it was estimated that an expansion would make the unit the second largest in the country.

Methylamines—A major chemical producer announced that a new plant to produce methylamines will be built at Belle, W. Va. The new unit will more than double the company's capacity to produce these materials which are currently manufactured by the firm in Houston, Texas. Completion of the plant is slated for the first quarter of 1961.

A low cost method of production, discovered in 1930, makes use of methanol and ammonia, raw materials already produced at the Belle site.

Methylamine derivatives to be turned out include dimethylformamide and dimethylacetamide. DMF finds use as a spinning solvent in the manufacture of acrylic fibers. Dimethylamine, a liquefied gas used in the production of liquid missile fuel, 2,4-D herbicides, pharmaceuticals, antioxidants and solvents, will also be made at the new plant.

Current price of dimethylamine is 28c. per pound as against 85c. in 1945. Price of dimethylacetamide is 75c. per pound and is expected to come down as commercial volume increases. Dimethylformamide price is set at 30c. per pound.

Molasses—Feeding cane molasses prices were steady at most points. Demand continued slow, but there were scattered reports of slight to moderate improvement. New Orleans was 9¾c. per gallon, unchanged, while Texas ports were unchanged to ¼c. per gallon higher. Chicago price was ¼c. per gallon higher.

Production of sugar cane for sugar and seed was estimated at 8.2 million tons October 1, according to the Crop Reporting Board. This represents a decline of 1 percent from the September 1 estimate, but is about 22 percent above last year. Both production and yield per acre are reported at record high levels.

Production of sugar beets as of October 1 is estimated at a record high of 16.5 million tons. The figure is up 1 percent from the September 1 estimate and 9 percent above 1958.

Hawaiian cane blackstrap production in the January through September period amounted to 53,789,557 gallons as against 30,368,403 gallons for the like period last year. Shipments to the United States in the nine months period this year totaled 45,413,712 gallons as against 20,280,600 gallons in the corresponding period last year.

Paraformaldehyde—Resin manufacture continued to take a good portion of production. This material furnishes formaldehyde in a concentrated form for manufacture of high solids phenolic and urea resins. Low water content is said to allow larger batches with higher yields and less cycling time. The material also finds use in water-repellant finishes, adhesives and pharmaceuticals.

Pentaerythritol—Material continues to find good use in the production of medium and long oil alkyds in conjunction with glycols. Sources point out that recent years have seen a uniform rise in PE production as use in alkyds and rosin esters has become widespread.

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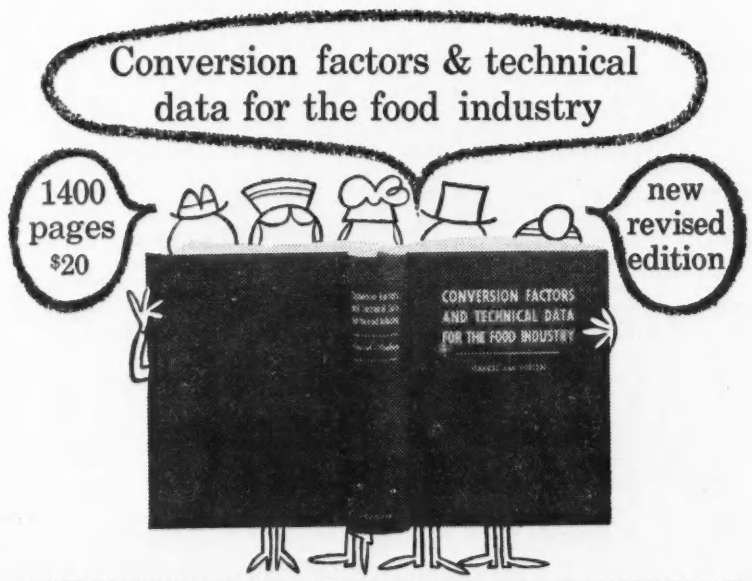

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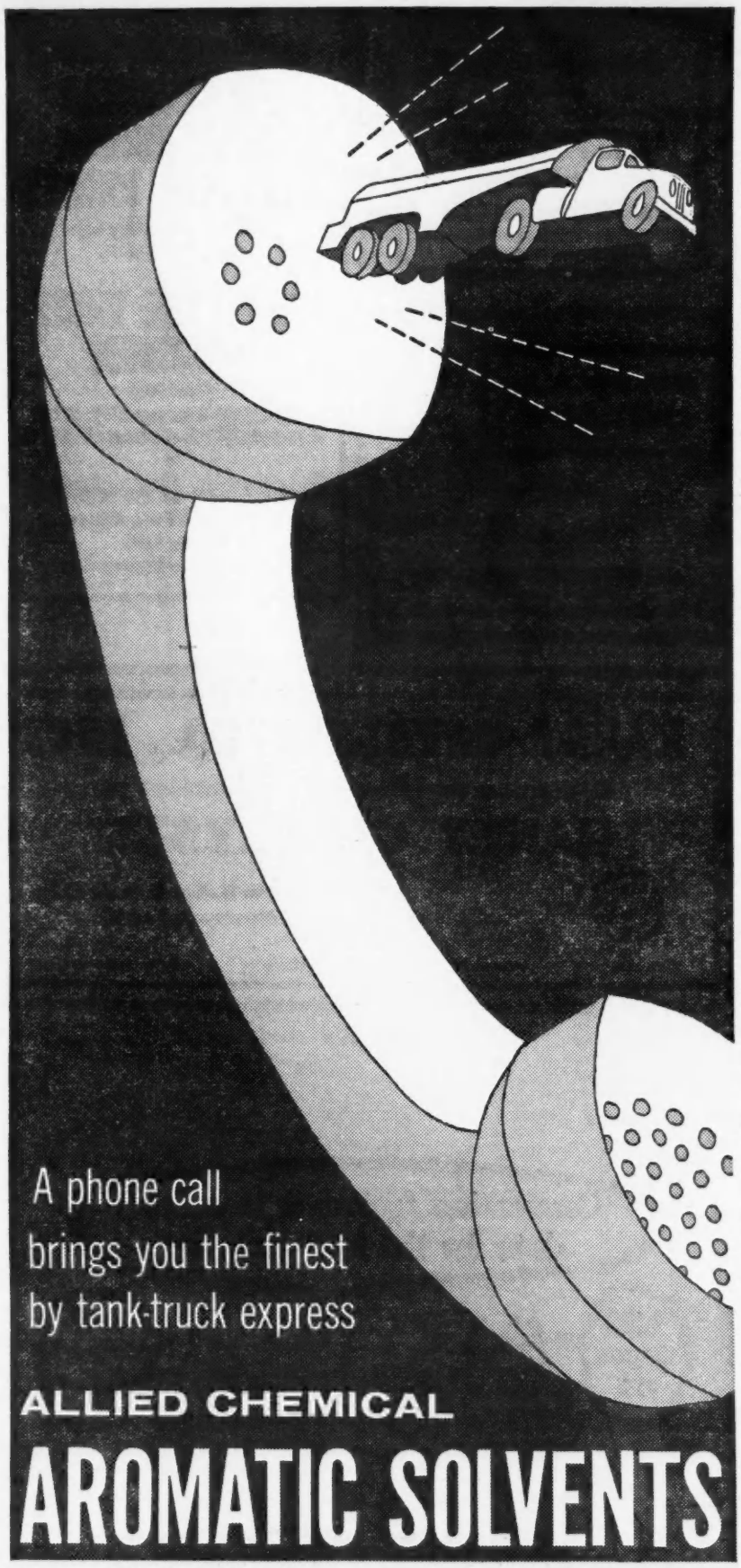

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Coal Chemicals

The vitiating effects of the steel strike reached a little deeper into automotive, railroad and chemical industries last week. It appeared that the Hundred Days Strike would drag on for another week or ten days before the mills come to life again. Companies avoided expensive start-up operations as a result of labor's delaying action in the nation's courts. Producers of phthalic anhydride continued to report that supplies were drying up. The amount of naphthalene available for production of phthalic is extremely limited and the prospect for the balance of the year is very poor. There was no likelihood of a quick reversal in the snug supply situation surrounding benzene. Phenol and styrene stocks were reported adequate.

A coal chemicals producer, long rumored to be on the verge of entering the maleic anhydride market, made it official last week with the announcement that the company would build a twenty million pound-per-year facility for the production of maleic at the company's Neville Island, Pa., location. Both maleic anhydride and fumaric acid remain in tight supply. Both are slated for reductions in price come January 1. Maleic will drop 5¼ cents per pound in tanks and carload or truckload, while fumaric will be reduced 4½ cents per pound in carload or truckload lots.

A shortage of steel drums in the chemical industry is a problem that has come more to the fore in recent weeks. Chemical producers layed in a heavy stock of steel containers in the period prior to the strike. However, supplies of drums, as well as every other type of steel, have been depleted without replacement.

The American Iron and Steel Institute estimated that steel production in the week ended October 25 would amount to 13.1 percent of theoretical capacity equivalent to 371,000 net tons of steel. Output in the previous week was 368,000 tons, in the comparable week one month ago, 362,000 tons and in the corresponding week one year ago, 2,026,000 net tons.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 24, 1958
118.47	118.47	118.45	118.53

For Current Prices see page 10

Basic Products

Benzene—No quick reversal of the snug supply position in this market is expected in the near future. Stockpiles have continued to dwindle without adequate replacement due to the shutdown of coke operations since the beginning of the steel strike on July 14. Petroleum recovery of benzene and imports helped keep the market on an even keel for many weeks.

In addition, inventories of benzene, as well as finished chemicals made from benzene, were built to high levels in the months immediately prior to the strike.

However, sources point out that there is a limit to the number of storage tanks available and that while a two month strike would have caused no serious dislocations, the current shutdown has run to nearly three and one-half months.

There were further indications that start-up of the mills under a government injunction will be something less than smooth and that an eighty-day "cooling off" period will do little to alleviate the supply problems of those cokeoven chemicals which have been adversely effected by the strike.

For one thing, repair of furnaces will have to be undertaken and this could make for a fluctuating steel rate in the initial days of operation. Also, mills are reported to have inventories of coke on hand which will have to be used up before more coke (and more by-product chemicals) are made. Finally, the attitude of labor, working under pressure, will be an important factor.

Cresylic Acid—Producers have yet to feel the supply pinch in cresylic acids and cresols. However, stockpiles have slowly been used up without adequate replacement and observers feel that any flurry in demand would tighten the supply in short order. Demand, which usually hits an uptrend in September, has failed to come through this year and sources say the general uncertainty over conditions in the steel industry have tended to slow the business pace.

Report of the Tariff Commission indicated August production of tricresyl phosphate at 2,204,513 pounds as against 3,282,461 pounds in the previous month and 1,931,983 pounds in the comparable month last year.

Naphthalene—The supply of naphthalene remains critical. Producers continued to report that supplies of phathalic anhydride were drying up and alkyd resins and phthalates have been pressured by the supply pinch.

The strike and the drying up of import material has led producers to increased use of o-xylene as a starting material. However, substantial export sales for the latter has tightened supplies in that market also. Problems of "flashback" and smaller yield also make the material difficult to work with.

Some sources feel the situation will bring increased interest in the recovery of high-melting point naphthalene from petroleum sources in this country.

Phenol—Producers reported production schedules were being met. As yet, a shortage of benzene for phenol production has not been in evidence. Output in each month since early spring has continued to outrun the comparable months of last year by 20-25 million pounds. Natural phenol is, of course, tight and expected to remain so for some time.

Pyridine—Report of the Tariff Commission indicated production of refined two degree pyridine from tar distillers and cokeoven operators in August amounted to 114,385 pounds as against 123,596 pounds in the previous month and 69,813 pounds in the comparable month last year.

Dyes

Direct Black—August production of direct black (C.I. 30235) amounted to 358,882 pounds as against 460,863 pounds in the previous month. Output in the first eight months of this year was 4,119,259

Aromatic Chemicals Output: August

Figures for benzene, xylene and toluene include cokeoven operators, tar distillers and petroleum operators. Creosote oil statistics include distillate, as such, and creosote content of solution, on 100%-creosote basis.

		August 1959	August 1958	First Seven Months 1959	First Seven Months 1958
Benzene	gals.	19,648,524	22,033,640	222,434,113	176,056,041
Creosote oil	gals.	5,586,669	9,154,844	62,601,971	68,506,430
Cresols, m-p and o-m-p fractions	lbs.	2,345,043	1,932,325	23,662,077	19,525,447
Cresylic acid, refined, all sources	lbs.	3,320,428	4,241,597	37,344,048	31,087,834
Dodecylbenzene	lbs.	41,573,734	38,583,637	327,760,666	289,198,203
Monochlorobenzene	lbs.	42,472,320	23 991,587	352,759,541	236,251,173
Naphthalene, crude	lbs.	21,534,475	25,939,421	298,541,873	197,188,592
Phenol, tech. and USP	lbs.	57,945,480	35,524,975	435,005,502	356,933,158
Phthalic anhydride	lbs.	30,969,573	21,829,837	251,011,892	192,770,432
Styrene monomer	lbs.	133,205,307	103,491,559	900,013,340	740,967,415
Toluene	gals.	18,659,875	14,095,908	161,767,690	130,929,255
Xylene	gals.	19,268,190	14,548,060	144,575,835	130,487,870

* June figure revised.

Coal Chemicals

pounds as compared with total output for last year of 4.5 million pounds.

Phthalocyanine Blue—Tariff Commission reported August production of this dye (C.I. 74160) at 304,616 pounds as compared with 302,482 pounds in the previous month.

Vat Jade Green—Output for August of vat jade green (C.I. 59825) totaled 272,616 pounds as against 213,469 pounds in the previous month and 274,015 pounds in the comparable month last year. Production in the first eight months of this year was 1,900,110 pounds as compared with a production for all of last year of 2.5 million pounds.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended October 25, was as follows:

Ammonia liquor	lbs.	131,579
Ammonium sulfate	lbs.	5,590,993
Benzene	gals.	514,777
Coaltar	gals.	3,058,656
Crude chemical oil	gals.	96,953
Toluene	gals.	124,654
Xylene	gals.	36,934

Intermediates

Aniline—Production of aniline in August amounted to 9,544,367 pounds as against the 10,245,836 pounds turned out in the previous month and 7,464,952 in the corresponding month last year. Output in the first eight months of this year totaled 87,409,439 pounds as opposed to 60,029,048 pounds in the January through August period last year.

Cyclohexane—Price of 98 percent material was quoted at 40c. per gallon in tanks, f.o.b. works. Carload of drums, same basis, list at 62¼c. per gallon, while less carlots, drums, same basis, are 66½c. per gallon.

A 99 percent cyclohexane is offered at 55c. per gallon, tanks, west coast works. Carload price of this material, delivered West of the Rockies, is 77c. per gallon; less carload, same basis, 85c. per gallon. Carload price, delivered East of the Rockies, is $1.02 per gallon; less carload, same basis, $1.10 per gallon.

Dodecylbenzene — Syndets market has held up well, sources report. Output of dodecylbenzene in the first eight months of 1959 amounted to about 328 million pounds, 38 million more than in the January through August period of last year.

Maleic Anhydride—A producer, long rumored to be on the verge of entering the market, made the plunge last week with the announcement that a new 20 million pound per year plant for production of maleic anhydride would be built at the firm's Neville Island, Pa., location.

Phthalic Anhydride — Producers continued to report a drying up of phthalic supplies. Phthalates and alkyd resins have been effected and the supply of naphthalene available for production of PA is extremely limited. Producers have used o-xylene for PA production, one source reporting that the company's use of the material this year runs to seven figures. However, substantial quantities of o-xylene has been sold to Japan for next year's requirements so that here too, stocks are limited.

Steel companies are reported to have coke supplies on hand, so that at start-up they will have to use what they have before making more coke which will yield coal chemicals.

The steel strike has emphasized the problem of coal chemicals production. However, some other factors have contributed their share to the poor supply conditions which have hit the naphthalene and phthalic anhydride markets this year.

In August of last year, it was announced that phthalic business would be solicited at 17c. per pound, 4c. under the then existing market. In the following months, consumers bought for immediate needs, keeping inventories at the lowest possible level. Then in February of this year, the price was dropped to 17c. per pound and naphthalene dropped from 7c. to 5c. per pound at the same time.

Consumers at once began to make heavy calls for naphthalene and phthalic to rebuild their depleted inventories and to prepare for a steel strike. In addition, import naphthalene, which supplied better than 20 percent of requirements last year, began to dry up as a result of the price cut in the domestic market and better demand for naphthalene from Japan, South America and on the continent.

Prospects for an alleviation of the phthalic and naphthalene supply pinch in the remaining months of the year are extremely poor. No help is expected from imports and the steel industry, when it gets back to work, will take time to crank up the naphthalene output.

Styrene Monomer — Shutdowns in the automotive industry continued to spread, according to press reports of last week. This serves as little comfort to tire makers as well as chemical producers of styrene monomer.

Producers have been turning out record amounts of styrene monomer every month and have, as yet, gone along without experiencing much discomfort from the strike. Considering the amount of synthetic rubber and plastics which go to the automotive industry though, fourth quarter prospects were growing steadily more clouded.

Monsanto Acquires Property In West Above Los Angeles

Monsanto Chemical Company has picked up an option on 450 acres of potential industrial property near Oxnard, Calif., about sixty miles north of Los Angeles. At least four tracts are involved in the property.

The St. Louis, Mo., chemical maker is not yet ready to say what its plans are for the new west coast site. Apparently, proper zoning and other local consideration must still be worked out.

Chlorine-Caustic Plant

—Continued from page 4

encompassing both inorganic and organic chemical operations.

Products range from basic chlorine and caustic soda to derivative chemical compounds such as sal ammoniac, sodium orthosilicate, calcium hypochlorite, ferric chloride, ammonia and hydrogen peroxide. This plant also manufactures such organic compounds as solvents, amines (organic intermediates), rubber chemicals, and raw materials for resins and plasticizers.

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Jobs & People

Allied Chemical Corporation's plastics and coal chemicals division, New York—**Robert H. Olson** has been named superintendent of the division's molding compound plant at Toledo, Ohio. An Allied man since 1946, Mr. Olson was previously supervisor of soda ash operations at the Solvay Process Division's Syracuse, N. Y., plant.

Borden Chemical Company, New York, a division of Borden Company —**Kenneth R. Smith** has been named technical sales representative for the six New England states. He will handle Borden's line of industrial and packaging adhesives.

Colton Chemical Company, Cleveland, Ohio, a division of Air Reduction Company—**Edward Rauh** has been named sales representative for western Ohio, eastern Indiana and Michigan.

E. I. duPont de Nemours & Co., Wilmington, Del. — **Dr. Crayton K. Black** has been named manager of the trade relations section of the dyes and chemicals division, succeeding **Paul K. Lawrence,** who recently retired from the company. Mr. Black has for the past five years directed the division's technical laboratory. In the parent company's elastomer chemicals department, **Harry G. Bimmerman** has been assigned to the newly-created post of manager of personnel planning. **Dr. Arthur C. Stevenson** becomes director of the elastomers laboratory, the post vacated by Mr. Bimmerman.

General Mills, Inc., Kankakee, Ill. —**A. R. Taylor,** formerly manager of the chemical division's petroleum chemicals department, has been appointed assistant director of personnel administration for the parent organization.

Koppers Company, Pittsburgh, Pa.—**J. O. Howard** has been appointed manager of the Port Reading, N. J., plant prastics division, replacing **E. A. Tenthoff,** who has been transferred to Pittsburgh as senior project engineer.

Eli Lilly & Co., Indianapolis, Ind. —**Lawrence W. Gibbes** has been advanced from the post of Jacksonville, Fla., district manager to that of sales director of the Africa and Middle East districts in the company's export affiliate.

Monsanto Chemical Company, St. Louis, Mo.—**James L. Dougherty** has been appointed personnel manager of the Lion Oil Company Division's production and exploration department, and **William R. Farrell** has been named director of the parent company's recently organized marketing services department.

National Aniline Division of Allied Chemical Corporation, New York — **F. B. Johnson** has been named assistant to the resident manager of the New York sales branch.

Chas. Pfizer & Co., Brooklyn, N. Y.—**Dr. Charles S. Delahunt** has been named manager of toxicology and animal health and supply, and **Dr. Robert Stebbins** has been named manager of pathology in the company's macrobiology department.

Roche Laboratories, Nutley, N. J., a division of Hoffmann-La Roche, Inc.—**James Baxter** has been advanced to the newly-created position of director of education. He was previously manager of the Pacific northwest sales division.

Texaco, Inc., New York—**S. T. McCardell** has been elected vice-president and manager of the Texaco Exploration Company, Texaco's wholly-owned subsidiary. He comes to his new post from that of assistant general manager of Texaco's domestic producing department at Houston, Tex.

Pitts. Coke Deals In on Maleic Anhydride

—Continued from page 5

Pittsburgh Coke has been selling purchased maleic in the market for some time in anticipation of its present decision to manufacture the material from its own cokeoven-derived benzene.

The Pittsburgh Coke disclosure caps a series of expansion announcements that have been coming from new and old maleic producers for the past several months.

Here's an indication of how maleic capacity is growing:

How-Maleic Capacity Is Growing

- Reichhold Chemicals, Inc., which has been operating a 5-million-pound plant at Elizabeth, N.J., expects to have another 20 million pounds of maleic capacity installed there by June of 1960.
- Monsanto Chemical Company, whose facility at St. Louis, Mo., is now rated by the concern at 40 million pounds annually, plans to on stream in the third quarter of next year with an additional 20 million pounds of capacity.
- National Aniline Division of Allied Chemical Corporation, which now rates itself about even with Monsanto on maleic anhydride, is taking steps to keep pace with its St. Louis competitor. National Aniline intends to build new facilities for fumaric acid at Moundsville, W. Va., that will double its acid capacity. On-stream date: June of '60.
- California Chemical Company is contemplating a debut in the maleic field with a 20-million-pound installation at Richmond, Calif.
- Heyden Newport Chemical Corporation, another newcomer in the business, is chipping in with a 24-million-pound-a-year maleic facility at Fords, N.J. The unit is due to start up operations by December of next year.
- American Cyanamid Company is upping the capacity of its now-abuilding maleic plant at Bridgeville, Pa. Originally pegged at 14 million pounds a year, the facility will now have a capacity of 20 million pounds by the third quarter of 1960.
- Utah Resin Company, a polyester resin maker in the Intermountain area, this month started up a new 2.4-million-pound fumaric acid plant at Salt Lake City, Utah. Most of the output is intended for captive use in the production of Utah Resin's line of isophthalic polyesters. Some may go to market after January 1.

Thus, the line-up of capacity on maleic anhydride—in millions of pounds—shapes up as fcllows:

	1959	1961
Monsanto	40	60
National Aniline	40	60
Reichhold	5	25
Heyden Newport	..	24
California Chemical	..	20
American Cyanamid	14	20
Pittsburgh Coke	..	20
	99	229

Drug Men Find Kefauver

—Continued from page 3

committee in preparing the investigation for a public hearing.

Beyond confirming reports that more companies are being drawn into the probe via the subpoena route, however, committee staff members are saying as little as possible about their work.

They are refusing either to identify the new companies receiving the subpoenas, to give the number now being contacted or to make public copies of the subpoenas.

It is their contention that the less said publicly in connection with the investigation at this time, the better it will be for all concerned.

The latest batch of committee subpoenas are understood to have been served on drug houses in the same class of drugs previously announced and do not go into new fields of pharmaceutical production. They are reported to relate primarily to steroid hormones.

Committee aides say that there are no changes in the announced plans for hearings starting in December which will deal in the beginning with specific products such as antibiotics, hormones, diabetic drugs, tranquilizers and vitamins.

Trade Name Chemicals & Specialties

Sales of synthetic adhesives have been growing at a fast clip. One figure has the synthetics, together with animal adhesives, accounting for more than 40 percent of the total adhesive market. The balance is taken primarily by vegetable and rubber-based materials. Adhesives derived from animal sources, however, have shown no upward swing in recent years. Many look at the growth in adhesives optimistically and say that the rise will continue. Growing use of plastics in building construction could be one field which will consume more adhesives. Also, the future growth of new or improved products is another factor in favor of the continuing prosperity of adhesives.

Softening agents find use in almost every textile processing plant in at least one or two applications. Estimated consumption of all types of softeners and lubricants in the textiles industry appears to be running over fifty million pounds per annum. The versatility of the fabrics, both natural and synthetic, nowadays necessitates a wide range of softeners.

Discussed below are two nonionic softeners. Characteristics common to the nonionics are the fact that they act as finishing agents as well as softeners which means the softener is still effective after any number of launderings. Endless numbers of modifications and combinations are available in the nonionic group. Polyoxyethylenes are some of the principal ones.

Thickening agents are described as increasing the body of thin liquids by increasing their viscosity. At the same time the liquid is thickened, a fluid structure remains. Gelling agents differ from thickening agents in that they produce a gel structure which does not break down. These agents are widely used in the manufacture of greases, cosmetics and certain polymers.

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

Adhesives

In July, Schwartz Chemical Company, Inc., announced the development of a general purpose adhesive which provides a high-degree of adhesion between many surfaces through a non-crystallizing, permanent, flexible bond. Trade named **"Rez-N-Glue,"** it is described as being a clear vinyl base adhesive with high solids content.

According to Schwartz, **"Rez-N-Glue"** is well-suited for cementing dissimilar plastics and plastics to non-plastics. It can also be used as a wet bonding agent, contact cement or by the reactivation technic.

Schwartz suggests their adhesive for use in the application of styrofoam to boat hulls, bristle setting in brushes, backing sheets for mirrors, paper labels for tin cans, umbrella handles, artificial flowers, display forms, fixtures and mannequins, and for the general repair of ceramic wood and household products.

Schwartz supplies **"Rez-N-Glue"** direct in 3 ounce tubes with nozzle tips, and in various gallon capacities.

Polymer Industries, Inc., offers **"ChemoTec 822,"** an organic compound which bonds by chemical action. The company says that its high fluidity and good wetting characteristics give deep penetration of joints by capillary action. Polymer explains that the application of heat sets up a chemical reaction which changes the molecular structure and hardens the bonding material.

"ChemoTec 822," an epoxy base, cold-curing adhesive, is always used together with **"Chemocizer 822B,"** in the proportion of 15 parts by weight to one part of **"822B."** With regard to method of use, Polymer explains that **"ChemoTec 822"** is mixed cold with the catalyst by hand-stirring. As curing proceeds, the mixture becomes heavier, gummier, and finally gels and hardens. The end product is that of a tough, durable plastic.

For the best results, Polymer suggests that the surfaces to which **"ChemoTec 822"** is applied be free of grease, oil, water and dust. Also, a roughened surface is easier to bond. Finally, concerning application hints, Polymer says that application of **"ChemoTec 822"** is made near room temperature.

Softening Agents

Nopco Chemical Company has a new type of cationic softener for cotton and synthetic fabrics on the market trade named **"Nopcotex AR-35."** The company especially recommends it for the finishing of acrylic knit goods and it has been proved effective on towelling where softness and water absorbency are of the utmost importance. It is also suggested for use on polyester, polyamide and the newer synthetics where extreme softness is desired.

According to Nopco, **"Nopcotex AR-35,"** a smooth, white paste, is odorless and non-yellowing and will not turn rancid nor discolor after long periods of storage. This cationic softener is said to be compatible with selected fluorescent dyes, corn starches, starch ethers, polyvinyl alcohol, polyvinyl acetate, and most thermosetting resins.

Concerning dispersibility properties, Nopco claims that **"Nopcotex AR-35"** disperses readily, giving an opalescent dispersion in warm water (120° F.). Clear solutions can be achieved in hot water at about 160° F.. On the subject of stability, **"Nopcotex AR-35"** is said to be stable in acid or mild alkaline solutions; it has a pH in a 2 percent solution of 5.0 to 6.0.

A softening agent developed by Onyx Oil & Chemical Company for use on acrylic-type fiber sweaters and knit goods is **"Onyxsan OS."** Typical physical characteristics of **"Onyxsan OS"** are as follows: good heat, storage and normal use stability, solubility in water, 8 pounds per gallon density, light tan color, thin paste viscosity.

According to Onyx, among this product's advantages **"Onyxsan OS"** gives, at low cost, softness, silkiness and loft to synthetic sweaters and knit fabrics; it minimizes color changes in dyed fabrics; provides antistatic properties; does not deteriorate on storage; is stable to hard water; and treated fabrics do not develop rancidity or odors.

Another cationic softening agent offered by Onyx is **"Onyxsan LG."** Also a complex amido derivative, **"Onyxsan LG"** is a cream colored paste with a slightly fruity odor. With regard to stability properties, Onyx says that their product has good heat stability, is stable on storage for long periods of time, and is stable under normal usage.

Readily soluble in water, Onyx claims that **"Onyxsan LG"** is compatible with dilute mineral and organic acids, with dilute alkalies and hard water, but is incompatible with anionic surface active agents.

According to the company, **"Onyxsan LG"** is distinctive in the durability it imparts to a finish and the smooth, drapey hand it provides.

Surface Active Agents

One of the long lines of surfactants manufactured by Atlas Powder Company is the **"Renex"** line. Of this series is the **"Renex 20"** series. These are nonionic esters formed by the reaction of ethylene oxide with refined commercial mixtures of unsaturated fatty acids and heterocyclic resin acids.

"Renex 20" is a concentrated, clear, amber, water soluble detergent. Concerning compatibility, Atlas says that

—Continued on page 71

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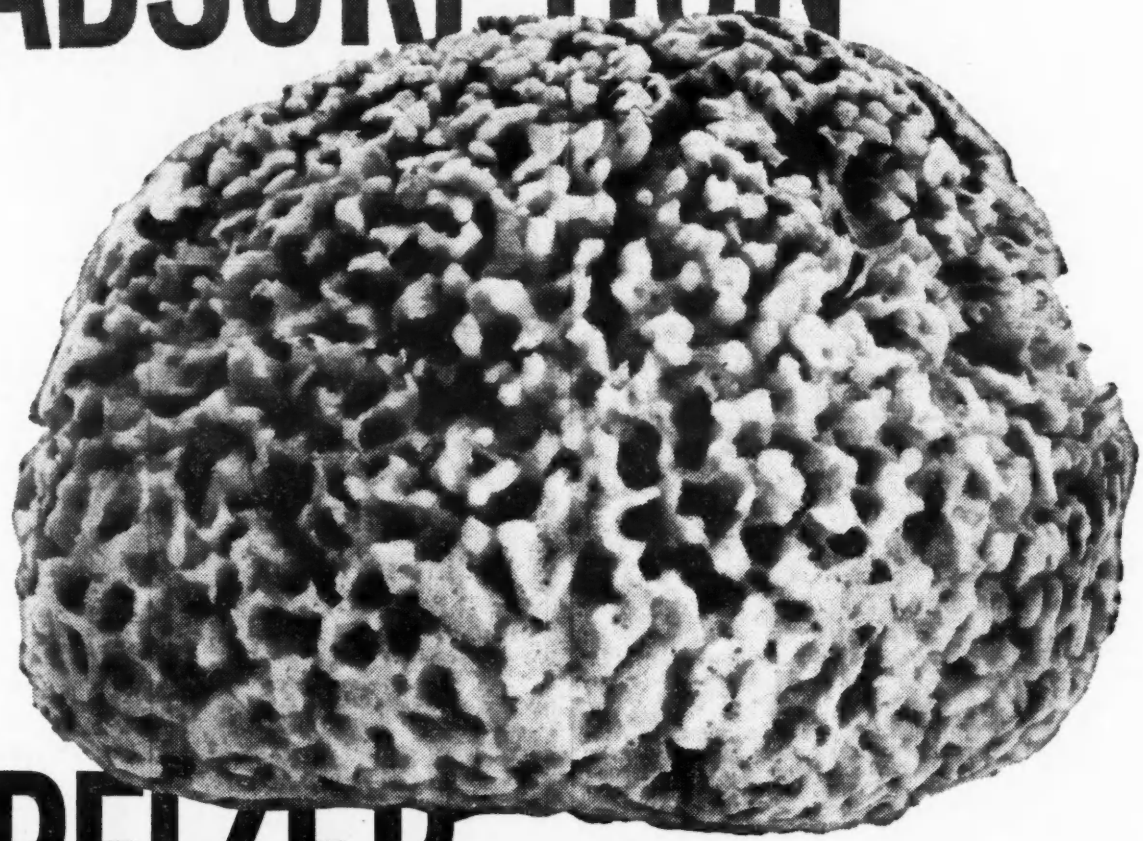

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Drugs, Fine Chemicals

In a move not without precedent, a leading drug and fine chemicals maker announced last week that it no longer intended to sell streptomycin and dihydrostreptomycin at less than official list prices—$40 per kilo for 50 kilos or more, $41 per kilo for lesser quantities. Considering the chasm that has separated official list from actual market prices of late, this action was, in effect, tantamount to a very substantial price advance. Prior to the announcement, OPD had been quoting both of the widely-used antibiotics at $34 to $36 per kilo while rumor had it that some large lots were being traded at as low as $30.

Obviously, the announcement was intended to be a "stitch in time"—as Premier Khrushchev might say—to prevent prices from dropping further, and a prod to other producers to get the business back on a firm basis. Should these other producers follow along—and it would seem advantageous for them to do so—competition will not be lessened to any great extent, of course, but it will mean that all of the trade will have to place greater emphasis on technical assistance and service, and less stress on prices.

Leading up to the price announcement were reports that one manufacturer had temporarily suspended or otherwise curtailed output of dihydrostreptomycin, as well as frequent comments from trade sources that the overall industry was suffering from chronic overproduction and overcapacity. Production facilities here were originally designed to take care of domestic as well as foreign requirements, it was explained, and the recent spate of overseas expansions by US firms, among others, has cut deep into export volume, leaving an excess of material to be absorbed by the domestic market.

The precedent referred to above occured in mid-August when a producer notified customers that it was no longer going to sell riboflavin at less than the official listing of $36 per kilo. Seeing as the then going-price for the vitamin was about $30, this move, on the surface at least, was a daring innovation that appears to be working to the mutual advantage of all concerned.

Other recent price news included an advance for monosodium glutamate, which did not go industry-wide, and reductions for cortisone, hydrocortisone, and methionine hydroxyanalogue.

Cortisone—Prices for cortisone and hydrocortisone are down in the vicinity of $1.15-$1.20 a gram for 1-kilo or more. A while back, cortisone was selling at a low of $1.30 a gram, hydrocortisone at $1.40.

Back of the price declines, reportedly, is a keenly competitive domestic market. Not to be underestimated, of course, is the fact of continual importations on top of fully adequate US production.

However, despite the depressed prices, sales volume is said to be excellent—especially so for hydrocortisone which has replaced cortisone in several areas.

It will be recalled that in mid-August a producer made a similar attempt to create price stability. In that instance, the announcement concerned riboflavin, which market firmed up subsequently—or so reports indicated.

Dihydrostreptomycin — The continual downtrend in dihydrostreptomycin prices obviously has the trade worried about when and where the bottom will be reached. For one leading producer, this concern is reflected in its recent announcement that it will no longer sell the widely-used antibiotic below official list prices. And official list is $40 per kilo for 50 kilos or more, $41 per kilo for less than that amount.

As can be readily seen, this action is, in effect, tantamount to a very substantial price advance. OPD had been quoting DHS at $34 to $36 per kilo, and rumor had it that actual trading prices of late had gone as low as $30 where a large quantity order was at stake.

Whether the higher schedule will be adopted uniformly throughout the trade and "stick" is yet to be seen. Of course, on the surface, it would appear to be to every seller's advantage to boost prices and focus the sales campaign on service and technical assistance. If price is the only consideration in a sale, it is logical to assume that there can be no end to price declines.

Iodine—Of the 158,102 pounds of iodine imported here in August, Chile's share was 135,979 while Japan took care of the remainder. The same countries shipped a total of 130,713 pounds to the US a month earlier.

Domestic market for iodine is pretty much unchanged; routine demand, adequate supplies are reported.

Monosodium Glutamate—A new and higher scedule for monosodium glutamate was recently issued by a leading manufacturer: $1.10 a pound for 20,000 pounds or more, $1.15 a pound for anything under that amount.

This new schedule was also distinguished by the quantity breakdown. Formerly, the firm had quoted at $1.05 for 1,000 pounds, at $1.07 for a minimum 100-pound order.

Despite this move, however, at least one other maker continues to list MSG at $1 a pound, any quantity.

MSG, the chemical that gives "Accent" its flavor-enhancing properties is also used by a number of Chinese restaurants, it's reliably reported.

Penicillin—A leading pharmaceutical maker reports the development of an improved, synthetically-modified penicillin, believed to have marked advantages over any form of penicillin now available.

Tradenamed appropriately enough "Maxipen," the new penicillin is said to "produce blood levels several times higher than the highest now available with the original penicillins or their modifications." It is still undergoing intensive evaluation.

Piperazine—All producers are now quoting piperazine hexahydrate at 86c. per pound for 1,000 pounds or more and at 89c. per pound for lesser quantities. Formerly, comparable listings were 77c. and 79c.

Also starting October 1, piperazine anhydrous was listed at $1.80 per pound,

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 24, 1958
60.23	60.23	60.23	62.54

For Current Prices see page 10

Drug and Fine Chemical Exports: August

Exports of selected drugs and fine chemicals for the months of July and August, as reported by the Bureau of Census, were as follows:

		August	*July*
Analgesics and antipyretics	lbs.	21,795	58,183
Antibiotics, n.e.c.*	grs.	11,481,531	24,748,637
Ascorbic Acid	lbs.	35,809	38,068
Aspirin	lbs.	36,980	198,848
B-complex (excluding B_1 and B_{12})	lbs.	45,688	46,217
Bacitracin	160-million units	8,586	16,995
Dihydrostreptomycin	gms.	228,687	7,658,460
Pectin and preparations	lbs.	62,205	27,269
Penicillin, bulk	million units	5,695,569	2,309,634
Streptomycin	gms.	2,762,879	4,905,300
Sulfonamides	lbs.	50,227	53,827
Thiamin	lbs.	3,225	3,296
Vitamin A, bulk and medicinal	lbs.	6,767	7,436
Vitamins, n.e.c.*	lbs.	79,724	41,959

* Not elsewhere classified by the Census bureau.

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Saccharin—Reports from the trade indicate that the market situation for saccharin is still complicated by the influx of foreign material, but as this has been the case for some time now, domestic manufacturers are no more, no less concerned than they have been right along.

In August, imports rose to 33,013 pounds from 30,778 in July. The Netherlands shipped 26,000 pounds, Japan 6,013, West Germany 1,000.

Sodium Alginate—August imports of sodium alginate totaled 22,160 pounds, down appreciably from July's figure of 25,120. Sources of supply: The United Kingdom (21,600 pounds) and France (960 pounds).

Current price for domestically-produced sodium alginate NF is $1.02 per pound for quantities of 300 pounds or more.

Streptomycin—In a bold attempt to create a more stable price structure, a leading producer last week informed its customers that it no longer intended to sell streptomycin below official list—$40 per kilo for 50 kilos or more, $41 per kilo for lesser amounts. The action, necessitated by a continually depressed market, was, in effect, a price advance since recent sales of the antibiotic have been made at anywhere from $30 to $36 per kilo. (Further discussion of the announcement appears under **Dihydrostreptomycin.**)

Vitamins—Price-wise, things in the vitamin business remain calm. Last change occurred in mid-September when B_{12} schedules were dropped to all time lows. Outlook now is for increased stability, if anything.

Demand is described as very active. Added to the increasing amounts of vitamins going into foods (cereals and the like), is the upturn in requirements from pharmaceutical makers. All told then, sales volume is excellent despite any tendency to price weakness.

Science has done it again. A leading drug and fine chemicals maker has developed a process that eliminates the unpleasant, inherent flavor characteristics and after-taste of certain vitamins and medicinals.

Being manufactured by this new process are three vitamins that formerly posed taste problems: niacinaminde, thiamine, and riboflavin.

Botanicals

Improved demand for most of the larger volume botanicals is noted by dealers here. And with few exceptions, they report, supplies are fully adequate. Thus, the lack of frequent and extensive price fluctuations is easily explained.

Wild cherry bark, in strong demand in the past several weeks from makers of cough remedies, is said to be on the short side, however, and this situation has brought the price higher, to 22 cents a pound.

Bloodroot—Said to be in extremely tight supply, bloodroot is commanding a higher than normal price at 90c.-$1.00 a pound. Interest is reported quite active.

Buchu Leaves—Current listing is 75c. to 80c. a pound, down from the former quote of 90c. Recent arrival of new crop material explains the decline.

Moderate interest, ample stocks are reported.

Chamomile Flowers — Roman flowers are presently bringing anywhere from $1.50 to $1.75 a pound, the Hungarian flowers about $1.25. Newly quoted and lower than the previous schedule, these prices reflect receipt of new crops.

Juniper Berries—Prices were recently advanced 1 cent a pound. Action brought the price for regular berries to a range of 16c.-18c. a pound, that for the hand-picked berries to 18c.-22c. a pound.

Indications from abroad are that the new crop is considerably below the norm, which fact accounts for the recent price increase.

Orange Peel—Price reductions were recently recorded. The current listings: sweet orange peel 14c. to 15c. a pound, bitter peel 28c. to 30c. a pound. Here, also, it was a case of fresh supplies.

Serpentaria Root—While dealers' stocks are small, prices appear to be trending downward. Dominant factor here, however, is the narrow, small-volume end-use pattern.

Current quote is $4.50 to $5.00 per pound.

Spearmint Leaves—Spearmint leaves of domestic origin are just about unavailable but imported material, which is usually of better quality, is taking care of all requirements.

Tragacanth Gum — Resellers market here is unchanged and firm. Still quoted are listings of $3.60-$3.75 for No. 1 ribbons, $3.40-$3.60 for No. 2 ribbons, $3.15-$3.25 for No. 3 ribbons, and $1.05-$1.15 for USP powder.

Wild Cherry Bark—Heavy buying on the part of cough syrup manufacturers during the past several weeks finds dealers' stocks of wild cherry bark at low levels. Consequently, the price for the botanical is up, about 4c. to 22c. a pound.

Rossed bark is said to be practically unavailable—it is not widely used anyway—so the 22c. price tag the botanical carries is looked upon as nominal.

Yerba Santa Leaves—Short supplies and modest demand are reported for this botanical which once enjoyed a fairly large "cough syrup" market. Prices range from 40c. to 45c. a pound.

Geigy and Curare

—Continued from page 4

the latter are potent muscle-relaxants, Dr. Karrer has found.

"Of the various curare alkaloids so far investigated, those occuring in calabash curare are the most active and have the greatest therapeutic possibilities," he said.

"Toxiferine is outstanding, not only because of its great potency but also because of its lack of side effects. The effect of toxiferine sets in slowly, and persists for several hours. It might be a valuable agent in the treatment of tetanus or other spastic diseases."

Calabash curare, employed by the natives of the Orinoco basin and upper Amazon region of South America, takes the name "calabash" from the Indian word for "gourd," which served as a container for the poison. The Indians dipped their arrowheads into this, which had the effect of paralyzing the nerves of their prey. The poison comes from the bark of strychnos plants that grow wild in the region.

Big-scale cultivation of some strychnos plants might be worthwhile, Dr. Karrer added, but the chemist prefers to be independent of the plant, if possible, which is why synthesis of the compounds was pursued.

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Pesticide Business This Year Seen Good

—Continued from page 5

negative as well as a positive side to the industry's legislative problem.

"Basically," he felt, "it stems from the philosophy of those who think the only way to solve a problem—or what they say is a problem—is to pass a law.

"Here the circumstances sometimes leave us no course of action but to oppose poor legislation or to see through amendment to change a bad bill to a good bill."

Just how great the industry's legislation problem is, was indicated by Robert S. Thompson, president of Thompson-Hayward Chemical Company, Kansas City.

Mr. Thompson reported that NACA was required to "review a total of 498 bills introduced in the various states during the 1959 legislative season which might directly, or indirectly, have an effect on the agricultural chemicals industry.

Fifty-Four Bills Require Action

"One hundred and twenty-eight of these," he said, "would have directly affected the industry to varying degrees. Direct NACA action was required on fifty-four bills."

Turning to the marketing of agricultural chemicals, Mr. Thompson declared that it is impossible to make "an excessive profit" on any such product today for two reasons:

- New chemical pesticides must compete with older products already available.
- The industry is competing for the farmers' dollar and must show him real cost savings or more profit in order to attract his attention, have him try and then regularly use new pesticidal materials.

The failure of herbicide producers to "properly expand the market for 2,4-D as extensively as might have been possible," he maintained, "has been due largely to low profits and demoralized markets."

•

Though 2,4-D is what he termed "one of the truly miracle products to come to light in the pesticide field in the last fifteen years," he indicated that no one making the product has been happy with the profit margins for the past five years or more.

"Despite the fact that we are selling some 30 million pounds of 2,4-D a year," Mr. Thompson reported, "we have reached the ridiculous stage where even the largest manufacturer apparently cannot afford the necessary expenditure to obtain clearance under the Miller amendment for the use of 2,4-D on forage.

"Nor have we spent adequate sums to educate our customers on the economic, safe and productive use of 2,4-D in areas where sensitive crops are grown, or where the product is used only to a limited degree."

Election of Officers

NACA elected Mr. Vernon to serve as its president for a third successive term (see picture story on page 7). Dr. George R. Ferguson, president of Geigy Chemitural Chemicals, division of Geigy Agricultural Corporation, Ardsley, N. Y., was elected vice-president of the association.

Lea S. Hitchner was re-elected NACA executive secretary and treasurer and Miss Lee H. Grobe was re-elected assistant treasurer.

Elected to NACA's board of directors were: John A. Field, vice-president in charge of marketing for Union Carbide Chemicals Company, New York; Paul Mayfield, vice-president of Hercules Powder Company, Wilmington, Del., and Herbert F. Tomasek, president of Chemagro Corporation, Kansas City, Mo.

Chemical Dose Prescribed

—Continued from page 7

by the turn of the century, Mr. McClure had this to say:

"The consequences of an ever-increasing mass of humanity presents a picture of inadequate supplies of food and fuel, excessive pollution of air, water and earth, and mounting congestion of transportation."

The answer, he said, does not lie in government intervention by crop dictation, socialistic land reforms or population control.

Basic research, directed at the age-old question of how a blade of grass can create basic food essentials, could, however, come up with an answer if it were encouraged and expanded by the chemical industry, he went on.

Here's how Mr. McClure put it:

"So, what should we of the chemical industry do? Practically speaking, our job is one of using fundamental knowledge to develop economic products and processes. We are truly dependent upon basic scientific achievements. It is, therefore, to our interest that we encourage the continuation and expansion of basic research whether it be in our laboratories, those of the universities, or those of the government. Furthermore, we must do all in our power to encourage more young people to major in the physical sciences, especially chemistry."

Goodrich Goal

—Continued from page 3

fabrics. Meaning: "Printing" can be done on a production line basis, eliminating the cost of engraving rolls and heavy fabric printing equipment.

- Developed a chemical process for a "two-faced" fabric. Spread-coatings of chemicals applied to one side of a cloth control penetration and aid flow of materials. Example: A reversible tablecloth containing the best qualities of both plastic and pure cloth.

These developments and others like them, illustrating Goodrich Chemical's all-out sales effort in the direction of the textile industry, were shown at a week-long trade show in New York last week.

Purpose of the show was to acquaint converters and finishers of fabrics with products—"Geon" polyvinyl latices, "Hycar" acrylic-butadiene polymers, and "Carbopol" hydrophilic carboxy vinyl polymers—they can use to bring about improved fabrics.

Also included in the Goodrich program are vinyl acetate latices and nitrile polymers. With such a line of materials, Goodrich calls itself the only supplier in the industry to offer such a broad range of chemicals to textile finishers and converters.

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34 bgs, Biddle Sawyer Corp, Tampico
38 bgs, Duncan Fox & Co, San Vincente
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CALCIUM CARBONATE—200 bgs, Pluess Staufer, Antwerp
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CLOVE—100 bls, Zanzibar
CLOVE OIL—10 dms, Djibouti
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775 tons, American Trust Co, Cebu
434 tons, Paul X Smith, Cebu
200 tons, Manila
COCONUT OIL, HYDROGENATED—71 tons, Hudson Shipping Co, Rotterdam
COD OIL—200 dms, Chase Manhattan Bank, Hamburg
COPAL GUM—62 bgs, Geismar & Co, Manila
106 bgs, Wm H Scheel, Manila
CORN STARCH—700 bgs, Rotterdam
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m CRESOL—2 dms, Rotterdam
CRESYLIC ACID—200 tons, Midland Storage, Liverpool
CUMIN SEED—60 bgs, Chase Manhattan Bank, Larnaca
210 bgs, Louis Furth, Istanbul
CURARE—5 cs, Abbot Lab, Callao
CUTTLEFISH BONE—100 cs, D F Young, Kobe
DAMMAR GUM—35 bgs, Archer Daniels Midland Co, Singapore
DEGRAS—104 dms, Silvey Shipping Co, Port Adelaide
53 dms, Chase Manhattan Bank, Melbourne
52 dms, N I Malmstrom, Dublin
DEXTRIN—200 bgs, Manufacturers Trust Co, Rotterdam
329 bgs, Stein Hall & Co, Rotterdam
723 bgs, Guaranty Trust Co, Rotterdam
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DICALCIUM PHOSPHATE—160 bgs, Wessel Duval & Co, Antwerp
DRY COLORS—42 dms, H Solodow, Gothenburg
DYES, COALTAR—48 dms, Orlex Dyes & Chemical Corp, Hamburg
9 dms, Naftone Inc, Hamburg
162 dms, H Bruckmann & Lorbacher, Hamburg
76 dms, Karr Ellis, Hamburg
EARTH COLORS—5 cns, United Ultramarine & Chemical Co, Rotterdam
74 bgs, Reichard Coulston, Larnaca
2,470 bgs, Naftone Inc, Bremen
EUCALYPTUS OIL—1 dm, [illegible]
FUEL OIL—334,160 bbls, American Independent Oil Co, Mena Abdulla
255,589 bbls, Esso Standard Oil Co, Aruba
128,069 bbls, Hess Inc, Bajo Grande
97,422 bbls, Metropolitan Petroleum Corp, [illegible]
55,612 bbls, Metropolitan Petroleum Corp, Las Piedras
16,[illegible] bbls, Esso Standard Oil Co, Las Piedras
111,674 bbls, Reserve Terminal Corp, Curacao
16,140 bbls, Socony Mobil Oil Co, Puerto La Cruz
GALL—2 dms, K Mayer, Melbourne
2 dms, J M Rodgers, Sydney
3 dms, Wilson Lab, Buenaventura
GELATIN—111 bgs, Bankers Trust Co, Hamburg
400 bgs, King Shipping Co, Hamburg
750 bgs, Manhattan Adhesives Corp, Rotterdam
35 dms, H Bruckmann & Lorbacher, Rotterdam
500 bgs, Transatlantic Animal By Products Corp, Vera Cruz
334 bgs, Transatlantic Animal By Products Corp, Hamburg
100 bgs, H Bruckmann & Lorbacher, Rotterdam
100 bgs, Antwerp
GINGER—168 bgs, Freetown
GLUE—800 bgs, Jung Forwarding Co, Liverpool
GLYCERINE—270 tons, Procter & Gamble Co, Manila
GUAR GUM—3,000 bgs, Stein Hall & Co, Bombay
220 bgs, Duche Uni Gum Corp, Rotterdam
GYPSUM—1,199 bgs, C B Chrystal Co, Liverpool
GYPSUM, CRUDE—26,653 tons, U S Gypsum Co, Hantsport
HEXYLRESORCINOL—2 dms, Hamburg
HORNMEAL—600 bgs, Transatlantic Animal By Products Corp, Hamburg
IODINE, CRUDE—176 kgs, Antony Gibbs & Co, Tocopilla
IRON OXIDE—480 bgs, American Chemical & Pigment Co, Malaga
46 dms, Hudson Shipping Co, Oslo
ISOSAFROEUGENOL—4 cs, Import Export Services, Yokohama
KARAYA GUM—49 bgs, S B Penick & Co, Bombay
118 bgs, Colony Import & Export Corp, Bombay
133 bgs, Paul A Dunkel, Bombay
KOLA NUTS—156 bgs, John Holt & Co, Accra
LACTIC ACID—8 djns, E F Drew & Co, Hamburg
LAVANDIN OIL—1 dm, Tombarel Products Corp, Cannes
LEAD, RED—420 bgs, Metimpex Corp, Rotterdam
460 bgs, Rotterdam
LEMON OIL—1 dm, Felton Chemical Co, Vera Cruz
17 dms, Ungerer & Co, Vera Cruz
LEMONGRASS OIL—12 dms, Fritzsche Bros, Cochin
LICORICE ROOT—145 bls, Meer Corp, Piraeus
LOCUST BEANS—237 bgs, S B Penick & Co, Larnaca
LOCUST BEAN GUM—360 bgs, Stein Hall & Co, Genoa
MAGNESITE—600 bgs, Globe Shipping Co, Trieste
MANGROVE BARK—1,900 bgs, Barkey Importing Co, Tumaco
2,920 bgs, National City Bank, Kilwa Masoko
MENTHOL—360 cs, Nichimen & Co, Santos
50 cs, Lo Curto & Funk, Santos
65 cs, Magnus Mabee & Reynard, Santos
65 cs, American Far Eastern Syndicate, Santos
100 cs, Mitsui & Co, Santos
25 cs, Magnus Mabee & Reynard, Keelung
50 cs, Chase Manhattan Bank, Keelung
MERCURY—200 flks, Chase Manhattan Bank, Coquimbo
10 flks, Arica
MOLASSES—1,032 tons, W R Grace & Co, Salaverry
MONTAN WAX—200 bgs, Frank B Ross, Hamburg
MUSTARD SEED—500 bgs, Louis Furth, Copenhagen
b-NAPHTHOL—280 bgs, Caldwell & Co, Rotterdam
NUTMEG—70 bgs, Hismoco American Co, Singapore
210 bgs, K H Landes Co, Singapore
OCOTEA CYMBARUM OIL—23 dms, Manton Trading Corp, Itajai
50 dms, American Metagraph Co, Itajai
22 dms, Givaudan Corp, Itajai
OLIVE OIL—250 ums, J H Schroder, Malaga
58 ums, Chase Manhattan Bank, Malaga
34 dms, Chemical Bank, Malaga
OPIUM—125 cs, N Y Quinine & Chemical Works, Istanbul
PALM OIL—300 tons, Belawan Deli
PALMKERNEL OIL—300 tons, Rotterdam
PALMKERNEL OIL, FRACTIONATED—21 cs, Dura Commodities Corp, Kobe
PAPAIN—3 cs, Bemo Shipping Co, Mombasa
PAPRIKA—75 bgs, Gallagher & Ascher, Alicante
100 bgs, J H Elton, Alicante
50 bgs, H Schlichting, Alicante
450 bgs, A A Sayia, Alicante
300 bgs, Alicante
PAPRIKA EXTRACT—66 cs, Alicante
PARSLEY SEED OIL—1 dm, L A Champon & Co, Marseille
PEATMOSS—2,500 bls, Premier Peatmoss Corp, Hamburg
4,000 bls, Premier Peatmoss Corp, Bremen
250 bls, Halfmoon Trading Co, Rotterdam
1,000 bls, E Dunwoody, Bremen
1,500 bls, Garden Supply Co, Bremen
750 bls, S Davis & Co, Bremen
500 bls, C Fafard, Bremen
PEPPER, BLACK—240 bgs, A G Dunn, Cochin
745 bgs, C M Van Sillevoldt, Singapore
280 bgs, A G Dunn, Singapore
390 bgs, Singapore
PEPPER, RED—100 bgs, California Commodities Corp, Kobe
53 bgs, P H Petry, Mombasa
PEPPER, WHITE—140 bgs, C M Van Sillevoldt, Singapore
PEPPERMINT LEAVES—14 cs, Lo Curto & Funk, Hamburg
PETROLEUM, CRUDE—141,997 bbls, California Oil Co, Restanura
180,409 bbls, Socony Mobil Oil Co, Puerto La Cruz
209,272 bbls, Phillips Petroleum Co, Puerto La Cruz
PHENYL TRIMETHYLAMMONIUM CHLORIDE—10 dms, Hoffmann La Roche Inc, Hamburg
PHTHALIC ANHYDRIDE—300 bgs, International Chemical Corp, Antwerp
334 bgs, International Chemical Corp, Hamburg
715 bgs, Antwerp
800 bgs, Venice
POLLACKLIVER OIL—75 dms, Wilbur Ellis Co, Yokohama
POLYVINYL ACETATE EMULSION—25 bbls, Lloyd Associates, Bremen
POPPYSEED—200 bgs, Ideal Trading Co, Rotterdam
150 bgs, Levy & Levis Co, Rotterdam
POTASSIUM CHLORIDE—67 bgs, Lo Curto & Funk, Hamburg
POTASSIUM FERRICYANIDE—120 dms, F Parisi, Hamburg
PYRETHRUM FLOWERS—100 bls, Prentiss Drug & Chemical Co, Puna
23 bls, Astoria Panamericana, Puna
QUEBRACHO EXTRACT—2,818 bgs, American Tanners Ltd, Buenos Aires
QUININE SULFATE—6 dms, Lo Curto & Funk, Hamburg
RICE STARCH—200 bgs, Aurora Manufacturing Co, Bremen
RUTILE SAND—4,000 bgs, International Titanium Corp, Brisbane
RUTIN—22 dms, S B Penick & Co, Brisbane
SACCHARIN—50 dms, Cosmos Shipping Co, Yokohama
20 dms, R J Saunders & Co, Yokohama
SAGE LEAVES—300 bls, Rijeka
SALICYLATES—77 dms, D F Young, Gothenburg
5 dms, Gothenburg
SANDALWOOD OIL—9 cs, Givaudan Corp, Cochin
SOAP BARK—620 bls, S B Penick & Co, San Antonio
SODIUM ALGINATE—50 dms, Stein Hall & Co, Glasgow
SODIUM CASEINATE—80 bgs, F H Paul & Stein Bros, Oslo
SODIUM CYANIDE—500 dms, Chemical Manufacturing Co, Liverpool
330 dms, Philipp Bros Chemicals, Rotterdam
SODIUM CYCLAMATE—11 cks, Cosmos Shipping Co, Yokohama
SODIUM FERROCYANIDE—5 bgs, Baird Chemical Corp, Yokohama
SODIUM PERBORATE—200 bgs, Hamburg
SPERM OIL—100 dms, Glasgow
SPERMACETI WAX—175 cs, Strohmeyer & Arpe, Kobe
STARCH—400 bgs, Rotterdam
STRONTIUM CHLORIDE—40 bgs, Terra Chemicals Inc, Bremen
SULFANILAMIDE—25 dms, Hamburg
SUMAC EXTRACT—40 cks, Glasgow
TALC—3,575 bgs, Charles Mathieu, Genoa
TAPIOCA FLOUR—3,000 bgs, Stein Hall & Co, Itajai
1,400 bgs, Poons Co, Itajai
2,500 bgs, Morningstar Paisley Inc, Itajai
2,205 bgs, American Metagraph Co, Henrique Lage
672 bgs, Manhattan Adhesives Corp, Kohsichang
9,632 bgs, Morningstar Paisley Inc, Bangkok
2,592 bgs, Stein Hall & Co, Bangkok
THYME LEAVES—109 bgs, Alicante
TRAGACANTH GUM—17 bgs, Khorramshahr
TRICHLOROETHYLENE—437 tons, Midland Storage, Liverpool
VANILLA BEANS—20 cs, Revlon World Wide Corp, Vera Cruz
10 cs, J Manheimer, Singapore
WATTLE BARK—2,731 bls, Hammond & Carpenter, Durban
YLANG YLANG OIL—1 cs, Noville Essential Oil Co, Manila
ZINC CYANIDE—100 dms, Chemical Manufacturing Co, Liverpool
ZINC SULFIDE—1,000 bgs, C J Osborn Co, Rotterdam
ZINC YELLOW—80 bgs, Revelli Chemical Co, Antwerp
ZIRCON SAND—230 dms, Mines Products Corp, Port Harcourt
7,505 bgs, Carborundum Metal Co, Port Harcourt
ZIRCON SAND—2,400 bgs, International Titanium Corp, Brisbane

Los Angeles

AGAR—25 cs, Pan Asiatic Trading Co, Shimizu
ALUMINUM PASTE—37 dms, Standard Commodities Corp, Kobe
ARROWROOT—3,000 bgs, Morningstar Paisley Inc, Kingston
COPRA—896 tons, Procter & Gamble Co, Jagna
Hohol
500 tons, Procter & Gamble Co, Cagayan
800 tons, Procter & Gamble Co, Medina
550 tons, Procter & Gamble Co, Dumaguete
500 tons, American Trust Co, Dumaguete
500 tons, Dumaguete
250 tons, Procter & Gamble Co, Nasipit
800 tons, Procter & Gamble Co, Cebu
800 tons, Procter & Gamble Co, Medina
CUBE POWDER—100 bgs, Foreign Domestic Distributors, Callao
CUMIN SEED—200 bgs, W Willner, Kobe
DAMMAR GUM—70 bgs, Internatio Rotterdam, Singapore
GYPSUM, CRUDE—16,351 tons, Kaiser Gypsum Co, San Marcos
MONTAN WAX—40 bgs, Dura Commodities Corp, Amsterdam
NAPTHA—125,433 bbls, Shell Oil Co, Punta Cardon
PEPPER, BLACK—200 bgs, California Commodities Corp, Belem-Para
140 bgs, Mac Albert Co, Singapore
PETROLEUM, CRUDE—130,799 bbls, Douglas Oil Co, Maracaibo
303,896 bbls, Wilshire Oil Co, Bandar Mashur
235,235 bbls, U S Refining Co, Dumai
386,553 bbls, Standard Oil Co, Dumai
SEEDLAC—375 bgs, Calcutta
SESAME SEED—250 bgs, B C Ireland, Corinto
SHELLAC—38 bgs, Calcutta
TAPIOCA FLOUR—1,120 bgs, Stein Hall & Co, Bangkok

Philadelphia

ANTIMONY OXIDE—1,000 bgs, Liverpool
BLEACHING POWDER—175 dms, Chemical Manufacturing Co, Liverpool
FUEL OIL—120,486 bbls, Socony Mobil Oil Co, Caripito
80,650 bbls, Hess Inc, Curacao
GYPSUM, CRUDE—11,304 tons, National Gypsum Co, Halifax
LICORICE ROOT—20,933 bgs, Bushire
MOLASSES—300,000 gals, S Western Sugar & Molasses Co, Guadaloupe
421,208 gals, S Western Sugar & Molasses Co, Martinique
300,000 gals, S Western Sugar & Molasses Co, Port Au Prince
OLIVE OIL—40 dms, Seville
PETROLEUM, CRUDE—116,263 bbls, Atlantic Refining Co, Caripito
216,976 bbls, Atlantic Refining Co, Punta de Palmas
117,089 bbls, Atlantic Refining Co, La Salina
194,402 bbls, Socony Mobil Oil Co, Covenas
408,757 bbls, Gulf Oil Corp, Mina Al Ahmadi
195,742 bbls, Eastern States Petroleum Co, Mina Al Ahmadi
168,185 bbls, Texas Oil Co, Puerto La Cruz
PHTHALIC ANHYDRIDE—890 bgs, Hamburg
SODIUM ANTIMONIATE—500 bgs, Hamburg
SODIUM CYANIDE—90 dms, Chemical Manufacturing Co, Liverpool
TAPIOCA FLOUR—2,800 bgs, Stein Hall & Co, Itajai
1,200 bgs, First National Boston, Imbituba
TRICHLOROETHYLENE—15 dms, Chemical Manufacturing Co, Liverpool
VANILLA BEANS—38 cs, Camax Co, Vera Cruz
51 cs, Zink & Trieste, Tampico

San Francisco

AMMONIUM BICARBONATE—360 bgs, C M C Chemicals Inc, Liverpool
AMMONIUM CHLORIDE—750 bgs, C M C Chemicals Inc, Liverpool
BONEMEAL—323 tons, Consolidated Chemical Industries, Buenos Aires
CALCIUM CARBONATE—1,600 bgs, Pluess Staufer, Antwerp
CAMPHOR POWDER—40 cs, Manufacturers Trust Co, Keelung
CASEIN—200 bgs, First Spice Co, Rotterdam
CASSIA—428 bls, H M Newhall & Co, Saigon
292 bls, Saigon
CELERY SEED—87 bgs, California Commodities Corp, Bombay
87 bgs, Kellys America Ltd, Bombay
87 bgs, Otto Gerdau, Bombay
COPRA—190 tons, Cargill Inc, Zamboanga
650 tons, Cargill Inc, Jagna
310 tons, Cargill Inc, Cebu
500 tons, Cargill Inc, Iloilo
500 tons, Cargill Inc, Bulan
750 tons, Cargill Inc, Tabaco
CUMIN SEED—250 bgs, California Commodities Corp, Bombay
DEGRAS—41 dms, S L Abbot & Co, Liverpool
FISHMEAL—10,000 bgs, Wilbur Ellis Co, Capetown
PEPPER, BLACK—200 bgs, California Commodities Corp, Belem-Para
140 bgs, California Commodities Corp, Singapore
PETROLEUM, CRUDE—486,691 bbls, Standard Oil Co, Dumai
PIMENTO—24 bgs, Kellys America Ltd, Kingston
100 bgs, Otto Gerdau, Kingston
SESAME SEED—150 bgs, W R Grace & Co, Corinto
150 bgs, H M Newhall & Co, Corinto
250 bgs, B C Ireland, Corinto
100 bgs, Lastreto Phillips, San Juan del Sur
SODIUM CASEINATE—100 bgs, West Coast Spice Co, Rotterdam
SODIUM CYANIDE—350 dms, C M C Chemicals Inc, Liverpool
SODIUM PERBORATE—500 bgs, Chemical Manufacturing Co, Liverpool
SODIUM SILICOFLUORIDE—200 bgs, D M Hicks, Rotterdam
TAPIOCA FLOUR—340 bgs, H M Newhall & Co, Bangkok
TEREPHTHALIC ACID—421 bgs, California Chemical Co, Yokohama
TRICHLOROETHYLENE—100 dms, C M C Chemicals Inc, Liverpool
ZINC OXIDE—150 bgs, Harrisons & Crossfield, Liverpool

Bids Wanted

Carbon Removing Compound, in accord with Fed. Spec. P-C-111A, dtd. 6 March, '59, item 1, 6850-281-3043 compound as specified above, 1 gal. unit qty per cn., Bid A & B, est. 6,600 gals.; item 2, 6850-281-3044, compound as specified above, 5 gal. unit qty. per cn., Bid A & B, est. 9,500 gals.; item 3, 6850-281-3042, compound as specified above, 55 gal. unit qty. per dm., Bid A & B, est. 9,955 gals., Bid IFB 36-600-60-162, Nov. 13, Directorate, Procurement & Production, Middletown Air Material Area, Olmsted AFB, Pa.

Cornstarch, 66,480 lbs., Fed. Spec. N-C-541a, Bid IFB M4-131-60, Nov. 2. Marketing Div., Veterans Supply Depot, P. O. Box 27, Hines, Ill.

Desiccant, activated, 6850-264-5905, active ingredient, A/A not impregnated with moisture indicator, Type III, Grade H, in accord with Mil. Spec. MIL-D-3716, dtd. 17 March, '52, Amend. 2 dtd. 28 Dec., '55, 5-lb. unit qty. per cn., Bid A & B, est. 43,000 lbs., Bid IFB 36-600-601160, Nov. 17, Directorate, Procurement & Production, Middletown Air Material Area, Olmsted AFB, Pa.

Drugs, Procaine Penicillin G USP, 1,042,400 bots., Bid RFP 5657Q, Nov. 2, Military Medical Supply Agency, 29th St. & 3rd Ave., Brooklyn 32, N. Y.; Phenobarbital tablets, USP, 456 bots., 432 bots.; Quinidine Sulfate tablets, USP, 600 bots.; Saccharin Sodium tablets, USP, 7,920 bots.; Sodium Chloride tablets, USP, 1,536 bots., Bid IFB M5-31-60, Nov. 3; Triasyn H taplets, 672 bots.; Penicillin G Potassium, USP, cryst., 840 bxs., 20,000 units, 3,408 bots., 500,000 units, 528 bots.; Therapeutic Formula Vitamin capsules, 2,160 bots., Bid IFB M5-32-60, Nov. 5, Marketing Div. for Drugs & Chemicals, VA Supply Depot, Somerville, N. J.

Paint, definite quantities, term contract, interior paints, Fed. Std. Colors 595; flat alkyd resin paint, Fed. Spec. TT-P-30; flat, oil base paint, Fed. Spec. TT-P-51D; rubber base paint, Fed. Spec. TT-91A; cold water paint, Fed. Spec. TT-P-23A; resin base emulsion paint, Fed. Spec. TT-P-88A; fire retardant paint, Fed. Spec. TT-P-26A, Bid SFW-3870-60, period from Dec. 1, '59 to June 10, '60, bid open Dec. 1, Business Service Center, General Services Admin., Region 9, 49 4th St., San Francisco 3, Calif.; 22,546 gals., full gloss enamel, Spec. Fed. TT-E-499B, Amend. L (QPL), Bid IFB 155-836-60B, Nov. 9; 6,845 gals., Spec. MIL-P-8555A (QPL), Bid IFB 155-870-60V, Nov. 13; 6,000 gals., primer coating, Spec. MIL-P-19453 (Ships), Bid IFB 155-907-60B, Nov. 5; General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

Petroleum Asphalt, 9,518 tons, PIO/C No. 489-31-278-9-90220, Invitation No. 602-R, Nov. 9, Office of Supply, Gov't. of the Republic of Korea, Seoul, Korea; 100,000 gals., rapid-setting emulsion petroleum asphalt, type RS-1, per Fed. Spec. SS-A-674B, Bid IFB 228-24118, Nov. 2, General Supply Depot, Naval Supply Center, Oakland, Calif.

Vestyron D, gran., colored, thermoplastic moulding compound, 28,900 lbs., S/A No. RMO18985, PA No. 391-390-99-921-9240, Nov. 6, Razak Ltd., 16, Kurbaniganj, Chittagong, E. Pakistan.

Coatings Materials

The growing shortage in naphthalene and in turn phthalic anhydride is making itself felt in several of the esters, including dioctyl and diisooctyl phthalate, and resins, such as the alkyds. Several producers of DOP and DIOP are now allocating deliveries. And although the steel industry may come to an agreement soon, it will be awhile before things are back to normal. Phthalate users are also plagued by the high costs of replacements.

Several of the alkyd producers have put their scanty supplies on allocation as well. With no relief seen in the near future for the shortage of naphthalene, and the slower rate of imports into this country, and the increasing demand for naphthalene from other corners of the world, the alkyd supply situation is not expected to improve and other producers are expected to start allocation.

A major producer of CP cadmium colors and cadmium-selenide lithopone colors hiked their prices upward. The first group was advanced 10 cents per pound and the second 3½ cents. The recent rise in the cadmium metal price was said to be big contributing factor.

Argentine casein continued its upward climb last week with the price reportedly ¼ cent higher. Sources said that prices were largely nominal. A tight supply picture in the Argentine has producers there limiting offers until the middle of December. Situation elsewhere is not much better. Poland is said to be very light on stocks and in Australia offers are almost impossible to find.

Price Trends

Advanced

Cadmium colors, CP, 10c. per lb.
Cadmium-selenide lithopone colors, 3c. per lb.
Casein, Argentine, ¼c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Oct. 24, 1958
103.03	103.03	103.03	103.10

For Current Prices see page 10

Prime Pigments

Cadmium Colors—A major producer of cadmium pigments raised their prices last week. C. P. cadmium pigments advanced 10c. per pound with various grades listed as follows: red, dark shade, $5.45; red, light shade, $4.55; red, medium shade, $5.20; medium light shade, $4.80; orange-red shade, $4.20; and all shades of yellow, $3.75 per pound.

Cadmium lithopone yellows, reds and maroons climbed 3c. a pound. Cadmium-selenide lithopone maroon rose to $2.72 with orange shade up to $1.54. Cadmium-selenide lithopone red, orange-red shade, is now listed at $1.68; red, dark shade at $2.52; red, light shade at $1.84; red, medium-light shade, $1.96; red, medium shade, $2.19. Cadmium-selenide lithopone yellow, all shades rose 3c. to $1.15 per pound.

According to the company who put the changes in effect, the higher selling prices reflect an increase in the cost of cadimum raw materials. The recent advance in cadmium metal was one of the contributing factors. Prices in this group have been relatively stable in the past year.

Chrome Colors—Higher prices of CP chrome yellows and oranges will be put into effect as of November 1. All shades of the materials will advance 3½c. to 35c. per pound The rise will bring prices back in line with what they were a year ago before November 1 when they were lowered by 3½c. Reasons for the upward trend were attributed to higher costs of labor and transportation. Also, there was some feeling that the rise in the price of lead in the late summer was a slight contributor.

There will be no fluctuations in the prices of chrome green nor in molybdate orange. Nor did they decline a year ago.

Zinc Pigments — Earlier this month, producers of leaded zinc oxide advanced their prices. Carlot price for 35 percent leaded zinc oxide was 15⅜c. per pound and less carlot listing was 15⅞c. Zinc oxide, 50 percent grade, climbed to 15¾c. per carlot and 16¼c. per pound for less carlot amounts.

Producers attributed the firmer tone to the rising lead price at the end of the summer. This rise was not reflected, however, in the prices of regular zinc oxides.

Lacquer Materials

In an effort to make a little go a long way several producers of dioctyl and diisooctyl phthalates are allocating deliveries. This is because of the acute shortages of naphthalene from which phthalic anhydride is made and in turn DOP and DIOP. The shortage has been as a result of the steel deadlock, because naphthalene is largely a source of the coking ovens.

And greener pastures will not be in sight for some time to come once the steel strike is settled. Producers say that it will take a couple of months for production to catch up with demand, and there is the possibility of rising prices in the early part of next year.

Another problem to face users of phthalates is the fact that replacements are costly as well. It could be that new plasticizer combinations, out of necessity, will be developed.

Synthetic Resins

The following figures show production in pounds for August and list July's figures for comparison, as reported by the Tariff Commission:

Production

	July*	August
Phenolic and other tar acid resins:		
Molding resins	16,518,133	18,236,957
Laminating resins	9,987,500	11,900,993
Protective coating resins, modified, unmodified except by rosin	2,033,279	2,427,203
Urea and melamine resins:		
Protective coating resins, straight modified	3,135,403	3,168,173
Styrene resins:		
Protective coating resins, straight modified	5,969,763	5,597,488
Vinyl resins:		
Total all types	94,271,961	98,765,712
Alkyd resins for protective coatings:		
Phthalic anhydride types, unmodified	22,203,843	22,788,382
Modified with tar acids, rosin and/or other material except styrene	5,553,614	6,650,537
Polybasic acid types except phthalic:		
Unmodified	332,656	354,688
Modified with tar acids, rosin and/or other materials except styrene	707,715	704,345
Rosin modification for protective coatings:		
Rosin, rosin esters, unmodified (ester gums, esterified with glycerol)	1,001,995	1,084,702
Esterified with other alcohols, pentaerythritol, glycols, etc.	789,352	1,015,247
Modifications with phenolic and other tar acid resins	2,261,571	2,234,754
Modifications with maleic and fumaric acids	2,727,637	3,271,707
All other modifications	3,924,948	3,821,262
Coumarone-indene and petroleum polymer resins	23,121,361	23,798,208
Miscellaneous synthetic plastics and resin:		
Materials including silicone resins	19,020,489	20,684,551

* Revised.

Alkyds—The alkyd resins are growing progressively scarcer, the industry agrees. Hope for relief in the shortage of naphthalene, from which phthalic anhydride and various esters are made, is said to be slight for some time to come. For, although the steel deadlock may end soon, inventories have been reduced to such dangerously low levels that manufacturers will be trying to build them up for at least the next six months.

Imports of both naphthalene and phthalic anhydride have been coming into this country, but lately at a slower rate. Growing worldwide demand for both of these materials coupled with the serious effects on them due to the steel strike may have the United States searching for now markets from which to buy. Several producers of alkyd resins have put their material on allocation, while others are expected to follow suit in the near future.

Among the other resins, phenolics are reported to be in good supply. And production of synthetic material is great enough to offset a tight supply picture in natural phenol.

The maleic resins are also in a bad way as a result of the phthalic anhydride shortages. New production facilities are in the offing for this material in the beginning of 1960.

Natural Resins

Gum—This market was reported to be normally active with prices remaining steady at previously established levels.

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Coatings Materials

Buyers continued to follow a policy of hand-to-mouth buying. Imports are flowing in without interruption, and are having no difficulty finding buyers.

Congo Copal gums, grades No. 1, . .No. 2 and No. 3, were all steady at 25c. to 26c., 22c. to 24c., and 16½c. to 19c. per pound, respectively. Among the Philippine gums, pale chips ranged from 23¾c. to 26c., nubs from 33¼c. to 37c., seeds had a nominal price of 20c., and sorts were listed at 22¾c. to 25c. per pound. Singapore grades of Dammar gum were listed as follows: No. 1, 36c. to 41c.; No. 2, 29c. to 32c.; and dust, 17c. to 19c. per pound. Finally, Siam was ranged from 30c. to 33c. per pound.

Shellac — Prices in New York of all grades of shellac were unchanged, and the Calcutta market was steady last week, sources stated. No complications are anticipated in the near future. The dock strike was caught in time before any shortages occurred in this country.

Orange shellac levels were steady with lemon grades listed as follows: No. 1, 37c. to 39c.; No. 2, 34c. to 37c.; and superfine, 32c. to 34c. per pound. Bleached bonedry shellac was steady at 46c. per pound and fully refined at 56c.

Miscellaneous

Casein—This market continued to be tight last week and the price of Argentine casein rose another ¼c. per pound. The listing now ranges from 21½c. to 22c. per pound. Dealers here said that all prices are largely nominal. New Zealand casein was held at 25c.

Future shipments of Argentine casein are reported to be limited to December now. Producers at that source are said to be holding back on their offers. The tremendous demand during the year from Europe continues to drain Argentine supplies. One source reported that no firm offers are obtainable for delivery here as the prices the Argentine is receiving from European bidders are higher.

Poland's offerings are small, and it is not felt that that source will be a factor on the market much longer. The Australian market is likewise extremely firm with offers definitely limited.

Fillers and Inerts

Asbestos—According to a report, July shipments of raw asbestos for the industry ran at approximately the same level as last year. The first seven months of 1959 still remain 17 percent ahead of the same period in 1958. Export sales of asbestos for the first half of 1959 are 25 percent above the same period last year.

The report goes on to say that August shipments of raw asbestos are expected to approximate those of 1958 with the remaining months somewhat higher than last year. The year end figure is expected to be 20 to 25 percent better than 1958.

Among the manufactured goods, the market situation for asbestos textiles continues much improved over the first half of 1959 and is expected to remain satisfactory for the balance of the year. Market conditions of asbetos brake lining shows no signs of abating from its current high level.

Orders for asbestos paper products is said to have increased somewhat with demand of asbestos millboard good and volume of business is expected to increase over 1958; asbestos saturated paper is also good at the present time due to industrial plant construction.

To mention a few others, orders for low pressure insulation are said to have dropped somewhat and prices to be competitive for that business which is available. Finally, asbestos pipes market seems to have recovered from last year's level, and business is seasonally satisfactory.

Naval Stores

Gum naval stores production during September was listed at 11,330 barrels of turpentine and 34,150 drums of rosin which was about 17 percent less than for September, 1958, according to the Crop Reporting Board. Production for the first half of the crop year was 11 percent below that for the same period last season.

Steam distilled and sulfate turpentine production during September was reported at 14,480 and 26,230 barrels, respectively. Steam distilled rosin output for the month totaled 98,510 drums, which was up 460 drums from a month earlier, while tall oil rosin production of 33,220 drums was up 1,490 drums. Gum and wood turpentine stocks on September 30 were slightly higher than a month ago but rosin stocks continued to drop sharply.

Rosin, Gum
(USDA, per 100 lbs.)

	Fri. Oct. 16	Mon. Oct. 19	Tues. Oct. 20	Wed. Oct. 21	Thurs. Oct. 22
Drums—					
M		...	...	$9.47§	$9.86
WG	$10.10	...	...	...	9.46
WW	...	...	...	...	10.37§
Bags—					
K	9.51§	...	...	...	9.76‡

Tankcars (for week ended October 22)—WG and below, $9.00; N, $9.00; WW, $9.30; WG, $9.26§

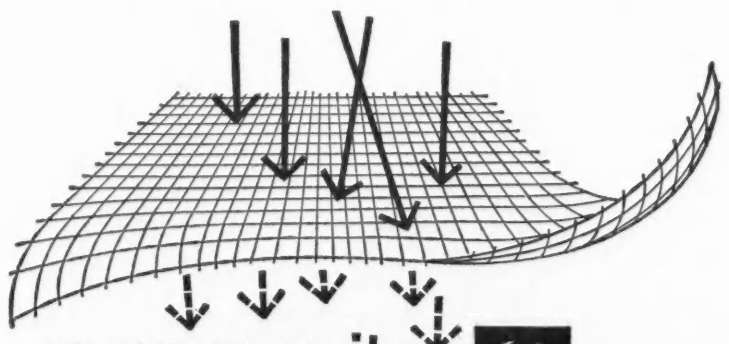
Sales, USDA
1,082* 422* 160* 4,155* 1,803*

New York
(Per 100 lbs., c.l., Friday)
WW, $10.90; WG, 10.50; K-M, $10.30; N, $10.35

Turpentine, Gum
(USDA, per gal., 7.2 lbs.)

Price	...	...	.53 4/10§	...	.53¼
Sales	...	...	10,000	...	6,000

* Drums equivalent. § Average price. ‡ Or better.



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Ceramic Opacifier Plant To Be Erected in Mexico

Construction of the first Mexican facility for the production of ceramic opacifiers used in wall tile and sanitary ware has been slated by the newly-formed Industrias M & T de Mexico, S. A., de C. V.

To be located in Monterey, the multi-acre plant will be owned jointly by a group of Mexican industrialists and Metal & Thermit Corporation, New York. Operations are expected to start by the end of this year.

The new plant will have an office and laboratory building plus a separate manufacturing structure. It will be manned by Mexican personnel trained in processes and quality control practices developed by Metal & Thermit in its US ceramic chemical operations.

Enzyme Agents Named By Miles Chemical Co.

Miles Chemical Company, Elkhart, Ind., a division of Miles Laboratories, Inc., has named three distributors to handle sales of enzymes to the farm feed industry.

They are: Blomfield-Swanson Feed Nutrients, Minneapolis, Minn., to serve the upper midwest; James Farrell & Co., Seattle, Wash., to cover the northwest; and H. V. Nootbaar & Co., to cover the far west and Hawaii.

Plant Regulators

—*Continued from page 7*

troubles. So said Justus C. Ward, chief of the pesticides regulation branch in the plant pest control division of the Agricultural Research Service.

Mr. Ward pointed out that USDA has no funds to administer the new legislation. Unless money is forthcoming quickly, he said, action on applications for registration will be "exceedingly slow."

He added that "this will affect older products as well as new ones, as the workload increases."

Secondly, he emphasized, Agriculture still must recruit a staff of competent specialists to enforce the new law.

Finally, Mr. Ward declared that "immediate enforcement of this new law is somewhat involved because of the timing features it carries."

To bring the plant regulators law into direct line with the food additives law, he said, this complicated time-table has been established:

Plant Regulators' Time-Table

- Where the use of a nematocide, plant regulator, desiccant or defoliant leaves a residue on a food and that pesticide was in commercial use prior to January 1, 1958, the enforcement features of the law take effect March 5, 1960, or such later date not beyond March 5, 1961, as the government may prescribe, or on the date of registration, whichever date first occurs.
- Where the use does not result in residues and the pesticide was in commercial use prior to August 7, 1959 (date of enactment), the enforcement features are also applicable, as outlined above.

Walter W. Dykstra of the Fish & Wildlife Service reported on another area of governmental activity touching on the farm chemicals industry; his agency's research studies on the effects of pesticides upon research fish and wildlife.

Though congress approved legislation last session authorizing the service to spend $2,565,000 annually for such an investigation, Mr. Dykstra noted that no additional appropriations were made for expansion of research above the $280,000-level already sanctioned for the present fiscal year.

Merck President Hits

—*Continued from page 7*

ing, and now, with the establishment of the six-nation Common Market in Europe, a counter-trend has clearly established itself.

What should the US and Canada do about it, specifically in relation to chemicals? According to Mr. Connor, they should form a little common market of their own.

He added: "The chemical industry in Canada and the United States should establish a top-level committee to sponsor and guide a study of means for removing our chemical trade barriers of all kinds, on an exclusive and bilateral basis."

Here's how formation of such a committee could be expedited, according to Mr. Connor: "It could be composed of, say, three representatives each from Canada and the United States, and might make use of staff help available through a contract with the Private Planning Association of Canada, the National Planning Association in the United States, or both."

Conceding that a good deal of time would be required to solve some of the knottier problems, he reminded his audience that even "after many years of negotiation, the European Common Market has set a period of fifteen years in which to reach its eventual final form."

In the meantime, "while the necessary studies and negotiations proceed," he said, "we would continue to take necessary remedial actions for pressing current problems within each country on a unilateral basis.

No Intent to Interfere

"For example," he continued, "I'm familiar with the Canadian chemical study of classifications and rates now going on, and there would certainly be no intent to interfere with its conclusion in any way. We recognize that many of our existing provisions have become obsolete, as have many of yours. We also recognize that in some cases the Canadian chemical industry may need short-term protection against the competitive cost advantage prossessed by the US chemical industry because of its larger productive capacity."

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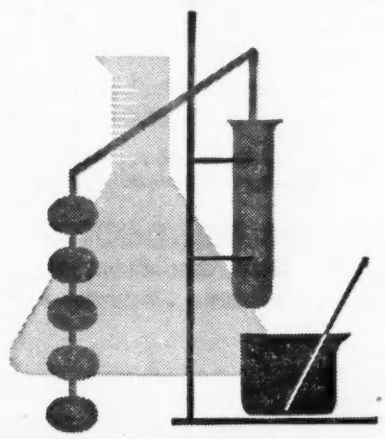
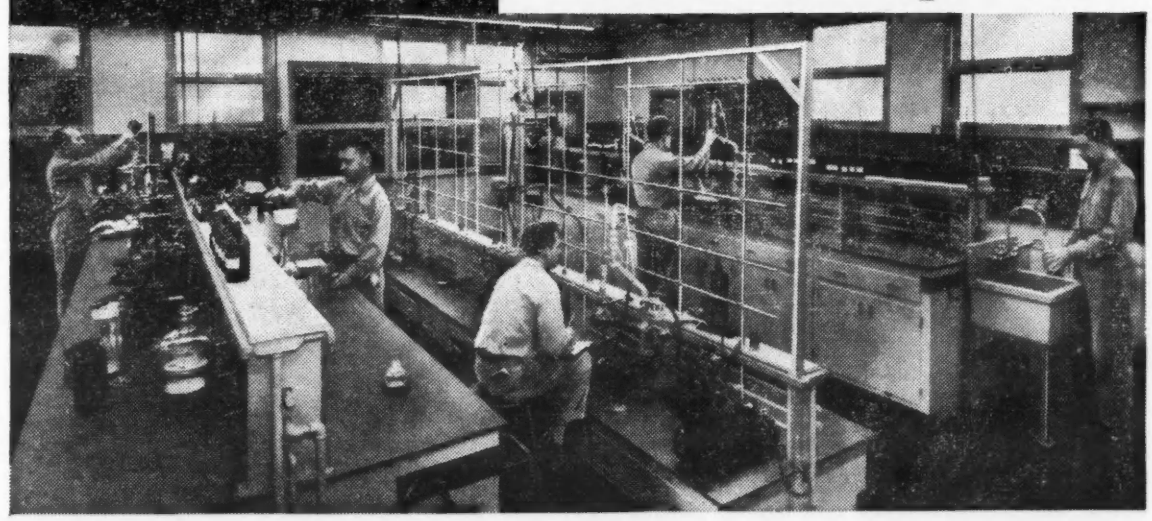


Research Headquarters



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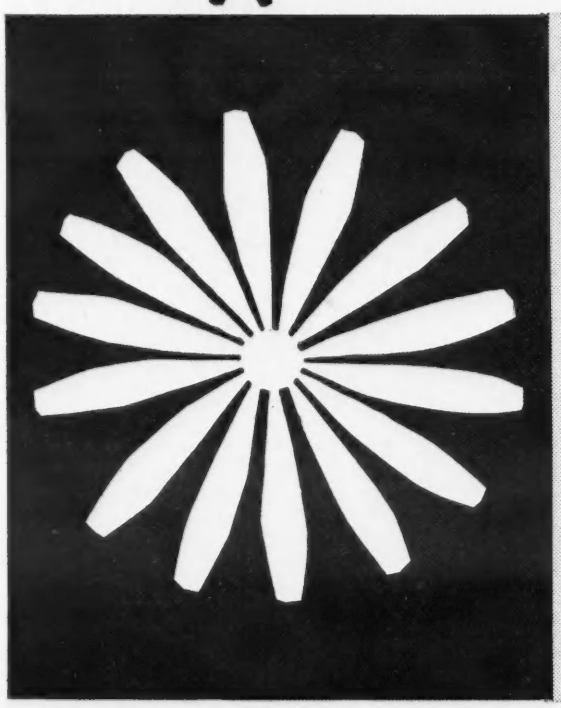

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And there are other reasons why Mapico iron oxides complete your paint picture. They offer permanence, high hiding power, light and alkali fastness, effective UV screening and good suspension.

DISPERSIONS

Columbian carbon black dispersions save equipment, power and labor costs, eliminate milling needs . . . just stir them in. They can be used alongside light color pigments without fear of contamination . . . and Columbian dispersions make desired jetness with less black.

CARBON BLACKS

NEO SPECTRA® MARK II Standard black for top-quality enamels. Fast dispersion, vehicle seeking.

SUPER SPECTRA® High blackness for enamels and lacquers. Satin finish or normal gloss.

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LAMP BLACKS *for soft blue tones*

COLUMBIAN CARBON COMPANY
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Paint Industry Ready to Do Big Business

—Continued from page 7

ucts harder and better than we've ever sold them before. We must sell more paint!"

Excerpts From Battley Address

Excerpts of Mr. Battley's address follow:

Back in 1947, when I first joined the staff of your association, the paint industry hit the billion-dollar mark in sales for the first time. This year we will have sales of over a billion seven hundred and fifty million dollars—a new sales record for the paint industry.

While this constitutes a very satisfactory figure, the fact remains that next year we must "Sell More Paint" and go above the two billion dollar level. Our traditional and newly developed markets have been expanding in every direction. On the basis of quality products and consumer acceptance, both proven factors, we should be getting a much healthier share of the consumer's budget.

I want to be known as a greedy man when I speak of selling more paint—and if we do not reach two billion dollars in 1960, I will be genuinely disappointed. We have the products, the selling tools, the brains, the incentive, and this country is on the threshhold of another boom era. What else do you need? If you will only put more hard selling into your operations, then reaching two billion dollars in 1960 will be much easier than reaching that first billion in sales.

America's population is growing, America's industries are growing, America's needs for our products are growing, America is starting over one million new homes every year — and over fifteen million American homes have needed painting inside and out for the last five or six years.

'Competitive Surfaces' Cited

I might add that with growth in every direction, what you know as "competitive surfaces" have also grown and take a good cut into certain of our traditional markets. These competitive products have blossomed in the past few years through more and more "hard selling" on their producers part.

We cannot afford to rest on our laurels —nor "mark time." 1960 is the year—you too must sell more of your own products. You've heard me say this before, but I've never meant it more than I do today.

Your association has some hard-hitting programs to help do this hard-hitting job. The American public—or at least that portion of the public with time to read, see or hear—has never been as paint conscious as it is today. Not only paint conscious, but paint-wise, thanks to our publicity campaign and now with our new "Hidden Power" sales training courses.

* * *

Over 3,000 copies of the manual for "Dealers and Dealers' Salesmen" have been distributed to date. The manual for "Chemical Coatings Salesmen" and "Color" are now available and the last section for "Trade Sales Manufacturers' Salesmen" will be released in December. Recognized authorities in the sales and educational fields tell us that this new sales training program is truly outstanding and will become a model for other national industries.

Members of the association's staff are constantly on the road, helping the organization of sales training classes throughout the country. Classes have already been completed in Savannah, San Antonio, Memphis and Toledo. "Pilot" classes are in action in Atlanta and other cities. The future success of our plans to train salesmen in modern techniques depends entirely on just how quickly such classes can be expanded at the local levels. Your help and cooperation is needed.

I cannot over-emphasize the importance to everyone in our industry of "Hidden Power." It spells out the thinking of the best brains in our industry, plus that of leading educators who are experts in presentation and teaching.

I am not expressing an idle hope when I say to you that one year from now I will report "Mission Accomplished." When I do, I will make a deep and grateful bow to the many "Hidden Power Sales Training Committees" throughout the country. The broad adoption of this new sales training program by our local paint associations, national salesmen, painting contractors, dealers, and the Federal and State Distributive Education and Vocational Leaders cannot mean but one thing —we will "Sell More Paint."

Now, our industry's sales volume is becoming more and more dependent on the hidden power of "Color."

The trade sales color promotion subcommittee has been very active this year and developed many new and unique color promotion ideas and merchandising materials. A new series of color booklets, designed to further educate the consumer on the advisability of using paint colors in home and institutional decor will be published early in the new year.

You will recall that, at our last year's industry color exhibit, current color promotion materials of many of our members presented for the first time an insight into just what the leaders of the industry were doing to promote color. For comparison, I suggest you visit the 1959 version of this same exhibit, a larger and better showing with more new ideas than last year. It's on this floor of the hotel. See it, study it and then do your utmost to improve your own promotion.

Urges Reading of Printed Reports

I know that you know that in the time available, it is humanly impossible to include every highlight of the association's activity in detail in my annual report. In the interest of time and the rest of our program, I ask your indulgence while I condense for you a few—far from all, but some—of the more important accomplishments of your association's committees and staff. I trust that you will read carefully the printed reports of these splendid committees.

Research by our statistical division has developed new and timely data on such expanding paint markets as furniture, appliance and television production, swimming pools, pleasure crafts, motels, and other building categories. Since these data indicate the sales direction of the entire paint industry, it's well worth your efforts and study.

The technical division's Bulletin No. 11 clarified the procedure for obtaining Food & Drug Administration clearance for food container coatings. We met with the Shipbuilders Council of America and discussed their problems concerning hazards that may result from painting in enclosed areas. We then were able to publish information that cleared away their confusion.

The bulletin on traffic paints, and the pamphlets on "Painting Asbestos-Cement Products" and "Painting Hardboard" were also the result of cooperative work with various government agencies and industry organizations directly concerned with another product or activity.

Furthermore, investigations by our technical division have developed material for similar cooperative reports as varied as the flame spread rating tests on fire retardant paints; the painting of vinyl wall coverings; heat reflections from painted roofs; possible uses of radio-isotopes in the paint industry; the painting of galvanized steel; "Before and After" use or installation; the development of a standard method of analysis for lead paint at the one percent level; paint as a vapor barrier for interior walls; and the

Paint Federation Puts Adams in Top Position

The Federation of Paint & Varnish Production Clubs has elected Raymond C. Adams its president. Associated with Gilman Paint & Varnish Company, Chattanooga, Tenn., he was chosen last week at the annual convention in Atlantic City, N. J.

Voted president-elect was Eugene H. Ott, of Herbert Schorndorfer, Cleveland, Ohio. Elected treasurer was William L. Foy, of Foy Paint Company, Cincinnati, Ohio.

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for real economy in varnish manufacture

Enjay Dicyclopentadiene is used by many leading varnish manufacturers to effect production economies. As an extender for drying oils, it reduces the cost of the finished product, yet assures high quality. As a modifier for semi-drying oils, it actually upgrades them so that they approach drying oils in reaction time and drying time. Enjay Dicyclopentadiene is also used in versatile alkyd resins and other types of surface coatings. Like all Enjay Petrochemicals, it possesses high purity and uniformity. Can this outstanding petrochemical help reduce your product cost?

For complete information... *write your nearest Enjay office for Enjay Technical Data Sheets No. 1 and No. 2. Enjay's laboratories and expert staff are glad to provide information and technical assistance.*

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correlation of consistency measuring instruments. All of these activities will aid you to "Sell More Paint."

We have been cooperating fully with the Federation of Paint & Varnish Production Clubs in support of the Paint Research Institute. The institute's primary interest is in finding the "unknown" scientific facts needed by our industry.

Our scientific committee studies and recommends research projects which are submitted to us by PRI.

Then they are assigned by PRI to universities or colleges qualified in the field to be explored. There is no duplication of effort. During the past year, this association has furnished half of the funds expended on the following research projects:

Repainting of Chalked Emulsion Surfaces—Brooklyn Polytechnic Institute.

Film Formation from Polymer Emulsions—Case Institute of Technology.

Corrosion Studies No. 1 — Missouri School of Mines and Metallurgy.

Forces at Interfaces (formerly Adhesion and Adhesives)—University of Louisville.

Dispersion of Pigments Under Controlled Rates of Shear—Lehigh University.

Binary Liquid Solutions at Interfaces —University of Montreal.

Relation between Composition and Properties of Heterocyclic Compounds—Northwestern University.

Molecular Weight Determinations by Ultra Contrifuge—McGill University.

Heat of Solution of Polymers as a Function of Composition— University of Montreal.

Relation of Functional Groups in Polymers to Physical Properties—University of Delaware.

Paint Research Institute Lauded

The Paint Research Institute is a valuable asset to our indutry and merits the continued support of our group collectively and individually.

We faced forty-six state legislatures on the legfslative front during 1959, and checked the hundreds of bills introduced to find the 167 which directly or indirectly applied to the industry. As you know, labeling continued to be the major problem.

In Baltimore, which departed from our standard or model labeling law for lead paint, Dr. Huntington Williams cooperated fully with us and agreed to accept lid labels and sticker labels as fulfilling the requirements of his city's ordnance. For the most part, the trend in proposed state laws has been toward protecting against hazardous household products.

The model act sponsored jointly by the Manufacturing Chemists Association and the Chemical Specialties Manufacturers Association is becoming more acceptable throughout the country and laws in line with this model act were passed in Indiana, Colorado, Illinois, Ohio and Vermont.

Under these laws, no changes are required in existing labeling for combustible and flammable products, or in cautionary labels for products containing more than one percent lead or other harmful ingredients—except that an additional warning *"Keep Out of the Reach of Children"* is required on virtually all labels.

Earlier in the year, the executive committee directed the Legislative Committee to draft model paint labeling laws for use at both national and state levels. Our model state labeling laws have been approved for use whenever the hazardous household products laws of the Manufacturing Chemists' Association and the Chemical Specialties Manufacturers Association could not be substituted for undesirable legislation.

The association now follows a new and positive approach to the problem of lead poisoning blamed on paints. With the cooperation of national and local health authorities we have a continuing campaign of positive education on the causes and cures of lead poisoning through posters and other public relations media.

Diagnostic Standards for Lead Poisoning

As a result of the work of our general counsel and Dr. John H. Foulger, the chairman of our toxicological committee, with the Lead Industries Association, the Public Health Service has distributed to physicians throughout the country diagnostic standards for suspected lead poisoning cases. These criteria were developed by a committee of physicians, public health officials and toxicologists.

A second bulletin outlining methods of treatment for persons known or suspected to have swallowed paint was prepared and distributed to the nation's physicians by the Public Health Service. In an additional step, the Public Health Service's national clearing house for poison control set up a national cooperative program between its information centers and members of our industry, whereby precise technical information concerning the ingredients of a specific paint may be speedily obtained in all cases of local emergencies. Throughout the country, cooperation of our members with the Public Health Service has been one hundred percent.

Our general counsel appeared at the congressional committee hearings on the proposed mandatory functional discount and price fixing bills. He presented the reasons for our association's strong opposition to such legislation. None of these bills became laws. On the other hand, we strongly supported proposed laws to limit the powers of state to tax out-of-state manufacturers on their interstate sales. Both house and senate passed this legislation and it was signed by the President.

Foreign Investment Plan Urged

A $10-billion-a-year program of public and private investment by the United States and its friends in the less-developed nations to prevent their being dominated by Russia was urged by Sen. Jacob K. Javits of New York.

Sen. Javits proposed that the NATO Council be asked to appoint a commission to establish the basis for partnerships between the United States and other members for aid to the less developed areas.

Sen. Javits said that "the economic integration of the free world is today's number one challenge for the United States. It is in the free world's lack of adequate economic integration that our foreign policy is most vulnerable.

Four "danger signals" were listed by Sen. Javits as demanding the appointment of the NATO commission:

1. The most serious danger signal of tremendous concern to the United States is the increasing deficit in our balance of payments—which swung violently from a $500 million surplus during 1957 to a $3.4 billion deficit during 1958, and from April through June of this year the deficit at an annual rate soared to $4.6 billion.

2. The rate of economic advancement in newly developing nations must be sharply increased to insure that within the next ten years individual per capita incomes will be raised an average of 20 percent.

3. The growing capability of the Soviet bloc to undermine basic commodity markets in the free world.

4. Impairment of the channels of trade within the western community due to the split between the common market countries (the Benelux countries, West Germany, France and Italy) and the nations in the proposed European free trade area including Austria, Switzerland, Great Britain, Portugal, Norway, Denmark and Sweden. This danger involves the latter's desire for free access to the markets of the inner six countries and the potential discrimination against US goods in these markets, thus further aggravating our balance of payments problem."

NPVLA Picks Battley Again for Its President

Joseph F. Battley is again president of the National Paint, Varnish & Lacquer Association. He was reelected last week at the annual convention in Atlantic City, N. J.

Chosen with him were: Vice-president, H. Braith Davis, of H. B. Davis Company, Baltimore, Md., and treasurer, E. F. Cox, of Gilbert, Spruance Company, Philadelphia.

HOW to give better service to shellac users!

Shellac is big business at the Mantrose Attleboro, Massachusetts plant...150,000 sq. ft. of modern manufacturing facilities devoted to producing superior shellac products for industry and home.

QUALITY...RESEARCH...PRODUCTION...INTEGRITY... **These are the "secret ingredients" in every Mantrose shipment that insure the truly finer service our customers have learned to expect.**

QUALITY starts with the raw lac imported from India...and the rigid controls under which it is processed. For close to four decades, the Mantrose Corporation has held true to its pledge to produce the finest bleached shellac available anywhere...with uniformity of product you can depend upon, batch after batch.

RESEARCH backs up the Mantrose pledge with scientific quality control...with improvements that further enhance the innate superiority of natural shellac. If you have a shellac problem, or require a product tailored to your individual requirements...consultants from the Mantrose Laboratories are at your service.

PRODUCTION FACILITIES must also be modern, efficient. Our recently acquired Attleboro plant keeps step with growing demand for Mantrose products...insures prompt deliveries for our customers' normal and emergency needs.

But surely the most important test of real service is Integrity. It has earned the confidence of our customers, which made Mantrose growth possible. It is an asset we guard most carefully...for only by sincere service can we continue to earn this trust.

The Mantrose Corporation

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. . . in Chemical Product Formulations
. . . in Chemical Business Management

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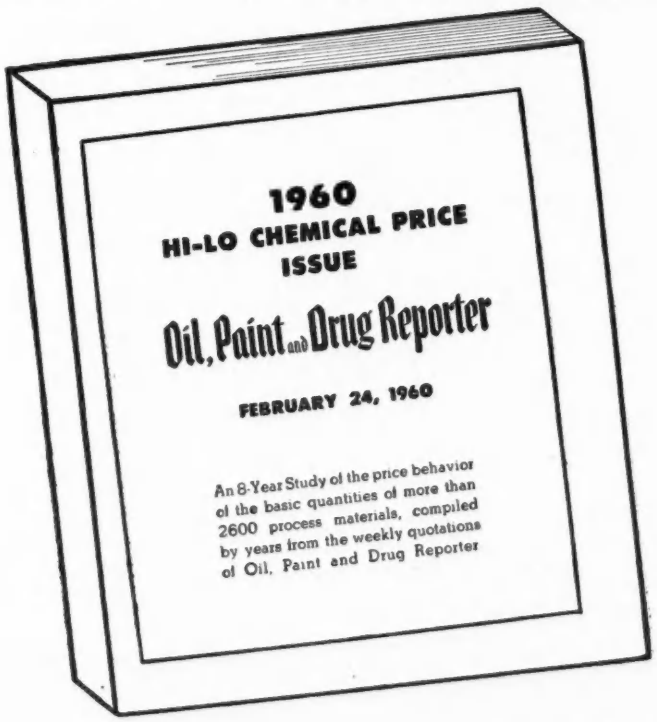
1960
HI-LO CHEMICAL PRICE ISSUE
Oil, Paint and Drug Reporter
FEBRUARY 24, 1960
An 8-Year Study of the price behavior of the basic quantities of more than 2600 process materials, compiled by years from the weekly quotations of Oil, Paint and Drug Reporter

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- Long term price behavior of chemicals and related materials is unlike that of the raw materials of any other industry.

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February 24, 1960

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Essential Oils, Aromatics

While the New York area dealers puzzled over the strange state of the spearmint market, the price of this plentiful mint went up another notch, 50 cents, making it $6 per pound. Demand is brisk, it was reported, but supply is abundant, so the reason for the inflation is anybody's guess. Peppermint, on the other hand, is not going up in price, but it is certainly not coming down, either. Opinion varies as to the future of the market, with about half of the dealers interviewed predicting firming and the other half, weakening.

Both citronella and lemongrass are firm with price advances expected—at least in lemongrass. It was reported that shipping prices have gone up some 20 percent within the last three weeks laying the groundwork for substantial spot price advances. Citronella is a different story. It seems that the 4,400,000 pound quota the Formosans imposed on their exports, is about to be met.

If this amount has been shipped before the end of the year, it is likely that they will actually stop trading, thereby creating a tight market situation. The latest word from source indicates that Formosa producers will not expand the quota no matter how fierce the demand.

Weakening markets are geranium and vetiver, according to the dealers. Vetiver has been so expensive for the past three or four months that a good many of the regular dealers discontinued the item. With source prices on the wane, these dealers are getting back into the vetiver business—but at much higher prices than they were quoting, say in July when they got out. No actual price reductions have been noted, but they are anticipated within the near future.

Geranium is weakening slightly now, but it is expected to take quite a drop once the new crop comes in toward the end of this year and the beginning of 1960.

There is some feeling in the trade that the government's report on world pepper production may be misleading. This is reported on more fully under the heading, Pepper, in the Seeds and Spices category.

Essential Oils

Citronella—No spot changes were noted last week, but there is speculation that the market for Formosa material bears watching.

News from source indicates that soon, nobody knows just when, the Formosans will have reached their self-imposed quota for shipping citronella. As of September 30, they announced that they had some 900,000 pounds to ship before they reached the 1959 limit, 4,400,000 pounds.

It is possible, however, that they will expand this quota if it appears likely that world demands exceed this arbitrary limit, but it is also possible that they could demand higher prices for such material, dealers here speculated.

The last report from the island indicates that officials claim they have no intention of authorizing a single extra pound for shipment. This year's quota is 10 percent greater than that for 1958, 4,000,000 pounds.

Eucalyptus—Prices continue at 48c. to 90c. per pound for the NF rectified, 70-75 percent material in drums. The 80-85 percent material in drums is selling for between 53c. and $1 per pound.

Geranium—With the new crop expected at the end of the year, the market is showing signs of weakening. The price listing remains at $20.50 per pound for Algerian and $26 per pound for Bourbon, but price revisions are in the offing, say the dealers.

Lemongrass—Information from source indicates that prices have advanced some 20 percent during the past three weeks. This drastic rise has not yet manifested itself on spot, except to prompt dealers to announce the market is firm, but future price lists are bound to reflect the rise.

Material is still ranging between $1.20 and $1.75 per pound.

Again this week, we have information direct from the producing regions in India about the agricultural habits of this crop. The following was gleaned from an article in The Eastern Pharmacist, a monthly magazine published in New Delhi, India.

Price Trends

Advanced
Spearmint, 50c. per lb.

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Oct. 24, 1958
147.85	147.74	146.92	145.41

For Current Prices see page 10

According to S. M. Zahed, joint secretary of the Utkal Pharmacists' Association, oil of lemongrass is distilled from cymbopogan citratus stapfand C. and felxuosus stapt, the former being widely cultivated in India, Ceylon, and Strait Settlements, West Indies and other tropical countries. It occurs as a reddish-yellow or brownish-red, mobile liquid having a very strong odor, and resembling that of verbena.

In the Kerala state of India, lemongrass grows abundantly because the soil there suits its needs. In fact, some 50 thousand acres in the central part of Kerala are utilized for its cultivation.

The plant grows quickly, according to Mr. Zahed. Towards the end of the month of May lemongrass is reaped or cut for the first time. But the grass grows so rapidly, that it must be cut five or six times before the end of November. At that time, the entire quantity of grass is hauled to the nearest center where the oil is extracted.

Though the grass dries in the summer, the roots remain alive and soon after the rainy season begins, new grass begins to sprout. Then, this ever-demanding crop takes up its owners time for another nine months with watering, cutting and distilling.

Mr. Zahed says that new seeds must be sewn only once in every five years.

Lime—Distilled Mexican material is quoted at $6.25 per pound. No particular pricing activity was noted last week, but indications are the market is weakening mainly because the summer volume of business is over.

Nutmeg—Both the East and the West Indian material continue at prices beginning at $9.50 per pound.

Petitgrain—Out of the news for some time, this item popped up last week as a strengthening market. The price continues to range between $2.45 and $3.20 per pound, but several dealers have announced upward revisions in their price lists.

Peppermint—Opinion is about divided as to the actual status of this oil. Half the dealers interviewed felt that the market would begin to firm due to scarcity of material and the other half feared further price reductions because of a sizable 1959 crop.

No actual word has been received as to the exact amount of oil produced this year, but in August, the Department of Agriculture Crop Reporting Board predicted that peppermint oil would be 2,224,000 pounds, some 13 percent less than 1959, but 24 percent above average.

Spearmint—The 50c. per pound advance brought the price up to $6 last week as dealers here wondered just how much longer this economic fiasco can last.

To quote one company representative, trying to console an irate customer:

"The crop is way up. The price is way up. It doesn't make sense, but they are the facts."

Already the Department of Agriculture has estimated the 1959 crop to be something like one-third larger than the 1958 one. Yet, the price continues to rise.

Shippers report difficulty in getting the quantity of material they order even though the oil is obviously available. And dealers report demand to be adequate, perhaps above normal.

Speculation, of course, is that the producers are just holding on to their oil until the price gets to a level of their liking.

Vetiver—On paper, it looks like this oil is advancing in price, but in reality, it is coming down. The reason:

Many dealers stopped handling oil several months ago when the price sky-

Essential Oils

rocketed and the prices they quoted, with the qualification that they had virtually no material to sell, were relatively low. Now, with the situation at source easing somewhat and shippers eager to get rid of material, prices are dropping. Therefore, more and more dealers are getting back into the vetiver business.

They are, however, re-entering the market at a much higher level than when they cut down on their sales, back in the summer. So, their prices have advanced from the low level of mid-summer. But compared with the actual price of material last month, today's prices are lower.

Current quotations are, for the Bourbon, $16 per pound and for the Haitian, $14 per pound.

Aromatic Chemicals

Citral—Reports are widespread that the market is firming. Prices, however, continue at their previous levels: $3 for the regular grade in drums and $3.45 for the extra grade in bottles.

Musk—The price of Xylol material is $1.40 per pound and not $1.26 as this publication printed, in error, in its previous issue.

Seeds and Spices

Cassia—Trade, reportedly, is quiet, but dealers expect demand to pick up soon.

Ginger—High prices of African and Cochin very well may stimulate interest in the new crop Cochin which is to be shipped in December and January, dealers reported. Last year's crop, it was reported by an anonymous source, was sold in India and never got near the shipping ports. The word is that this ginger went into "moonshine" alcoholic beverages for the Indians.

Pepper—Little interest was reported in black pepper. The interest, it was said, is in the US Department of Agriculture's survey of world pepper production recently distributed. According to the trade, the conclusion that the 1959 production would exceed the 1958 production is not compatible with general belief. It seems that the main area of conflict is just how much pepper Indonesia will produce in 1959. Of course, it is difficult to get exact figures on Indonesian production—either through the government or through private companies. But reports from Singapore indicate that Indonesian black pepper production would be considerably lower than what it was a year ago, say some dealers here in the New York area.

The report estimated that 1959 production in Indonesia, world's largest pepper producing country, would be some 42,000,000 pounds. This would represent quite a substantial gain over the previous year's output, 38,200,000 pounds. Production for 1957, however, was a whopping 53,100,000 pounds.

The report's estimate of total world production was 149,500,000 pounds for 1959; 147,000,000 pounds for 1958, and 170,900,000 pounds for 1957.

Vinyls for Coatings

—Continued from page 7

developed a rapid air-dry resin for industrial top coats that set tack-free in about five minutes and harden into a tough, glossy finish without baking.

Mr. Greenhood's optimism is spurred by the rapidly growing use of vinyl dispersions to factory-coat metals for computing machine and television cabinets, automobile dashboards, sections of automobile bodies and other applications.

In the field of vinyl solution coatings, he notes, one of the significant changes has been in the development of systems that can be used on rusty metal surfaces after simple wire-brushing.

Factory coating of metals presently consume smaller quantities of resins annually, he concedes, but adds that it is growing faster than any other coating application.

Finally, there's vinyl latex markets: 45 million pounds go into latex coatings for interior uses.

Carbide says that its new epoxy coating method will enable a formulator to prepare, in two simple steps, a varnish with pre-selected properties. The necessary ingredients: a liquid epoxy ("ERL-2774"), bisphenol-A and any drying acid.

Shell claims that for the first time a 100 percent solids epoxy coating can be applied with conventional spray equipment because of its new hardeners—"Epon" curing agent "H-1" and "Epon" curing agent "H-2."

Colton, which asserts that it is the first polyvinyl acetate emulsions producer to go into the house paint market on a fully commercial basis, is offering a new high molecular weight copolymer vinyl emulsion ("Flexbond 800") which it says will give exterior paints a soft, uniform finish, outstanding for whiteness and color brightness.

ADM's new resin, "Aroplaz 6006," is a pure oxidizing oil modified alkyd which reportedly makes possible an industrial enamel with a five-minute tack-free drying time—against ten minutes for a very fast styrenated alkyd and thirty minutes for a very fast pure alkyd—and the flexibility, durability and color retention of conventional alkyd enamels.

Metal Oxide Samples, Data . Being Offered by Monsanto

Monsanto Chemical Company's research and engineering division is making available to industry samples and technical data on a series of micro-fine metal oxides which the company has trademarked "Micria."

Specifically, the division is making available in development quantities four of the new products—"Micria AD" and "AL" (aluminas), "Micria TIS" (titania) and "Micria ZR" (zirconia)—all of which show outstanding commercial promise, the St. Louis, Mo., company says.

DuPont Is Doubling

—Continued from page 3

is used principally in the manufacture of liquid fuels, fungicides, herbicides, pharmaceuticals, rubber chemicals, and solvents.

In addition to DMA, the plant will turn out the two derivatives: solvents for manufacture of acrylic fiber ("Orlon").

According to unofficial estimates from the trade, overall DMA capacity currently stands at 54 million pounds per year, which means 74 million pounds when the Belle installation comes on stream.

Here's how one unofficial source rates current capacity by companies: duPont, 2? million pounds per year at Houston, Tex.; Rohm & Haas Company, Philadelphia, 4 million pounds at Bristol, Pa., and 10 million at Philadelphia; Commercial Solvents Corporation, New York, 15 million pounds at Terre Haute, Ind.; and Pennsalt Chemicals Corporation, Philadelphia, 5 million pounds at Wyandotte, Mich.

Borden Set to Pick

—Continued from page 5

for the plant has already been ordered and engineering plans drawn up.

The resins unit is slated to produce 50 million pounds or urea and phenolic resins, polyvinyl acetate and acrylic emulsions yearly for west coast manufacturers of adhesives and paints. A capacity of forty-five million pounds yearly is planned for the formaldehyde unit.

The plant, part of an overall expansion program, will be Borden's sixth on the west coast. Ray T. Hanson, general manager of western operations, has been named to head it. Other plants are at Los Angeles and Santa Barbara, Calif.; Springfield, Ore.; and Seattle and Kent, Wash.

Dow Set to Round Out

—Continued from page 3

to provide more convenient supply and service to northeastern states. The Allyn's Point unit manufactures two of Dow's trade-named plastics, "Styrofoam" and "Styron."

Heretofore, Dow's latex-producing operations had extended westward from Midland, Mich., to Pittsburg, Calif., northward to Sarnia, Ontario, and down to Freeport Tex.

Since commercial introduction of the latexes in 1948, Dow has announced eleven expansions in the field.

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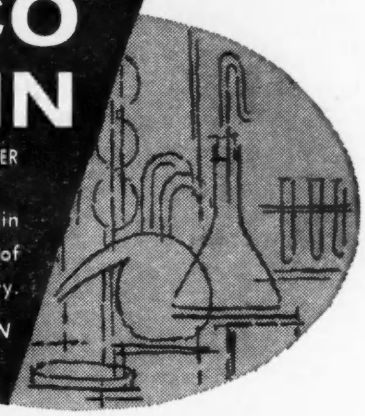

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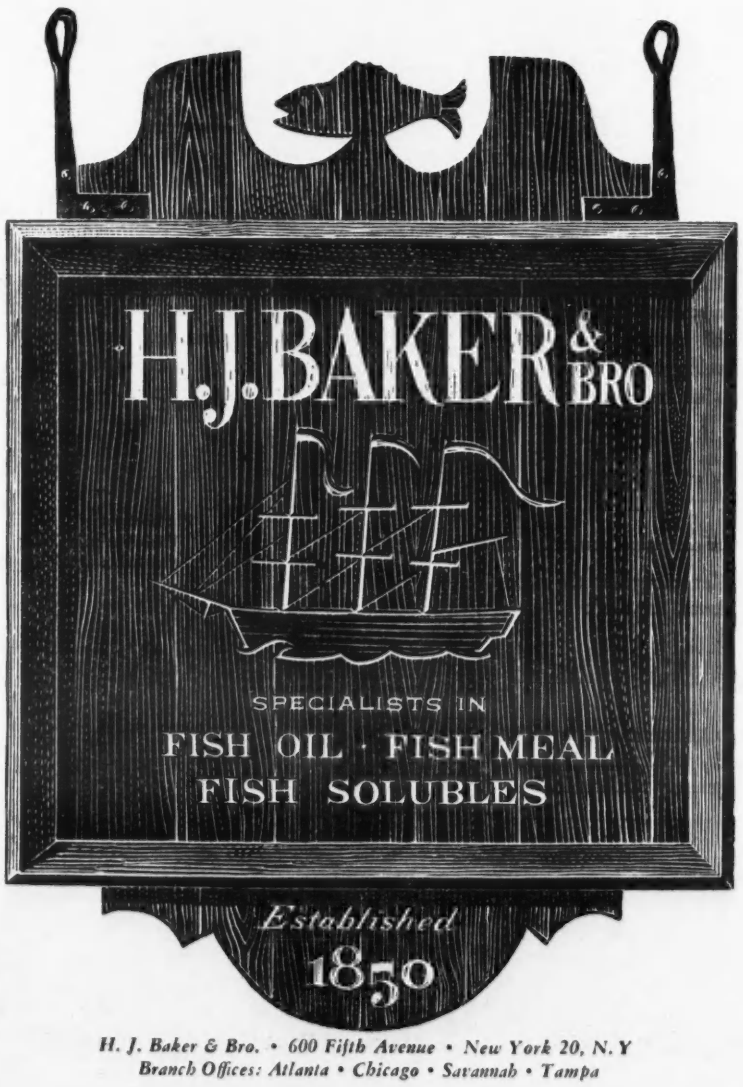

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Oils, Fats and Waxes

Coconut oil continued to lead edible oils in strength last week, rallying from the temporary easiness late the week previous. Crude regained the fractional decline advancing ¼ cent per pound. Peanut oil also was stronger due the lack of government peanut releases for crushing. Offers were scarcer and sales took place at ¼ cent per pound higher. Cottonseed and soybean oils were easy and slightly lower. Firmer tone developed in corn and soybean oil foots, while cottonseed foots remained unchanged. Slow consuming demand for olive oil combined with lower cost of replacements from Spain kept the local market unsettled and prices could have been shaded for sizable lots.

An easier tone prevailed in tallow and greases. Limited trading was reported at slightly lower levels. Offers were freer, without attracting buyers interest.

Higher cost of replacements, stiffened palm oil. Spot stocks were raised fractionally. Cod oil also was steadier due to the firmness of the Newfoundland market.

Brazilian castor oil was stronger, with sales noted at ¼ cent per pound higher. Offers were limited with sellers holding for an additional price increase. Improved demand for safflower oil caused sellers to raise asking price ½ cent per pound.

World exports of fats, oils and oilseeds in 1959 are expected to set a new record of 8.6 million short tons, oil equivalent, according to Foreign Agricultural Service. The estimated 500,000 ton increase in world exports of fats and oils can be accounted for entirely by larger U.S. exports, while relatively small increases are forecast for several important palm and olive growing countries such as Nigeria, the Belgian Congo and Tunisia, they are offset by decreases in major copra-producing countries and Argentina.

World production of oils, fats and oilseed in 1959 is tentatively estimated at 33.6 million tons, oil equivalent—up only 5 percent from 1958, but almost one-third larger than the 1950-54 average. Highlighting the production picture is the record output of vegetable oils and animal fats. For 1960, early indications are that the total production of fats and oils again will be high, but not as large as in 1959, FAS added.

Price Trends

Advanced

Castor oil, Braz., ¼c. per lb.
Cocoa butter, 1c. per lb.
Coconut oil, crude, Pac. coast, ¼c. per lb.
Cod oil, ¼c. per lb.
Corn oil foots, ½c. per lb.
Cottonseed meal, $5 per ton.
Palm oil, dms., ¼c. per lb.
Peanut meal, $5 per ton.
Peanut oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Safflower oil, ½c. per lb.

Reduced

Carnauba wax, No. 3 Ceara, 2c. per lb.
Parnahyba, 2c. per lb.
Chalky, 2c. per lb.
Yellow, 2c. to 4c. per lb.
Copra, $2.50 per ton.
Cottonseed oil, crude, ⅛c. per lb.
Refd., ⅛c. per lb.
Greases, ¼c. per lb.
Lard, cash, ⅛c. per lb.
Soybean meal, 50c. per ton.
Refd., ¼c. per lb.
Tallow, ¼c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Oct. 24, 1958
119.95	116.65	111.66	104.83

For Current Prices see page 10

Vegetable Oils

Castor — Brazilian oil was firmer with sales of No. 1 reported at 17½c. per pound, tankcars, New York, prompt delivery, up ¼c. Offers from Brazil were scarce. Domestic oil was unchanged and steady, moving in good volume of prompt needs.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	.....	1,200,000
Previous week	1,250,100	2,642,000
Corresponding week, 1958	.....	.....
Total this year	21,718,250	80,994,000
Corresponding period, 1958	11,934,000	58,797,000

Coconut—This market was strong with crude advancing to 19c. per pound, tankcars, f.o.b. Pacific coast for nearby delivery with trading thereat. November was boosted to 18¾c. and December to 18½c., same basis. Trading in New York was reported at 19⅞c., spot delivery, and maintained at 20c. November-December was held at 19¾c.

Sales of about 265,000,000 pounds of stockpiled coconut oil will begin in December, it was recently announced by the General Services Administration. These sales would add about 3 or 4 thousand long tons to world supplies each month, a small amount compared with the deficit in the major producing areas.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, October 23, follow:

	Sales	High	Low	Close
		Cents per Pound		
Dec.	172	11.79	11.67	11.79S
March	133	11.85	11.69	11.84@11.86
May	168	11.90	11.74	11.90@11.91
July	241	11.90	11.75	11.89S
Sept.	73	11.65	11.60	11.65S
Oct.	42	11.59	11.47	11.57@11.58

Total sales and switches, 829 contracts.

Corn—Trading was restricted to prompt delivery. Crude was sold at 11¼c. per pound, tankcars, f.o.b. mills, prompt delivery. Refined was unchanged at 14.93c., tankcars, New York basis.

Cottonseed — There was little change in futures market on the New York Produce Exchange last week. Trading was moderate, with price fluctuations narrow, the market closing practically unchanged for the week. Moderate export demand absorbed bulk of nearby offers. Hedging sales were about fair and taken for investment by commission houses. Additional October tenders increased the total to 115 contracts, which were stopped chiefly for refiners account. New export news was lacking. Cash oil was quiet and easier due to lower crude oil. Refined salad declined to 12⅝c. per pound, tankcars, New York, prompt delivery.

Crude cottonseed oil was slightly lower. Sales were reported at 9⅝c. to 9¾c. per pound, tankcars, mills in the southeast; 9⅜c., Valley; 9⅛c., Lubbock and quoted at 9⅜c., Waco. Production of crude oil in September was indicated at 2,723 tankcars by the Census bureau against 1,605, September last year.

Linseed—Demand was spotty, chiefly for actual needs. Withdrawals against contracts continued in good request. Prices were unchanged and steady at 14c. per pound, tankcars, Minneapolis, October-January; 14.2c., February-April; 14.4c., May-July, same basis and, 15½c., New York, prompt delivery.

Flaxseed—Bullish influences again prevailed in this market and Minneapolis futures moved into new highs while cash bids advanced to $3.70 per bushel, spot and to-arrive, basis Minneapolis. Most unusual development was the purchase of 2,500 tons of U.S. flaxseed by Canadian crushers, with indication that more business would be accomplished. Trading in the cash market was quiet on the advance, only seven cars posted, while to-arrive bookings amounted to nine cars. Arrivals for all accounts amounted to 227 cars (1 for C.C.C.), compared with 291 a year ago.

Oiticica—Trading was light. Market was steady due tight supply situation. Tankcars were held at 20½c. per pound, New York, prompt shipment. Drums ranged 22c. to 22½c., spot, as to quantity.

Olive—Buying interest lagged for spot delivery and shipment from sources. Spanish oil was inactive and offered at $52 to $53 per 100 kilos, used drums, f.o.b. shipping ports and $1 more for new drums. Tunisian oil was quiet and merely nominal, with rumors that November shipment would be available around $56 per kilos, drums, c. and f. New York. Oil on spot was unchanged at $2.40 to $2.50 per gallon, drums, as to quantity for Spanish and Tunisian, according to quantity.

Palm—Higher cost of replacements created firmer tone locally. Drums were higher, ranging from 14.25c. to 15.25c. per pound, spot, as to quantity. Tankcars were lifted to 11.70c., same basis.

Peanut—Sold up production coupled with the lack of government peanut re-

Oils, Fats and Waxes

leases kept this market in a firm position. Trading in crude was light at 12½c. per pound, tankcars, f.o.b. mills, prompt delivery. Refined oil was higher at 15¾c., tankcars, New York, prompt delivery.

Production of crude peanut oil last season totaled 97,432,000 pounds, August 1958-July-1959. it was reported by the Department of Agriculture compared with 67,278,000 pounds during August 1957-July 1958 while the output of peanut cake or meal amounted to 142,195,000 pounds and 102,365,000 pounds, respectively.

Safflower—Market was firmer due to active trading. Prices were raised ½c. to 15.85c. per pound, tankcars, New York, prompt delivery. Drums also were higher ranging from 17.85c. to 18.30c. per pound, spot as to quantity.

Soybean—Crude was unsettled, with trading spotty on the basis of 8⅜c. per pound, tankcars, Decatur, unrestricted for prompt delivery. Offers were generally quoted at ⅛c. more. Refined salad oil declined to 10½c., tankcars, New York, prompt delivery.

Tung—Business was quiet. Spot stocks were unchanged at 24c. per pound, tankcars, New York, with 23½c. named for November-December delivery. Drums were quoted at 25½c. to 26c. per pound, spot, according to quantity. Domestic oil was unchanged at 22⅝c., tankcars, f.o.b. mills, prompt and around 22¼c., for November forward.

Individual producers of tung nuts may have to reduce their production in 1960 by 20 percent to avoid the $50,000 limitation on no-recourse price supports contained in the agricultural appropriations act passed by congress last session, it was announced last week by the Department of Agriculture. The department added it will later state just how the 20 percent cutback will be brought about.

Miscellaneous

Cocoa Butter—Market was steadier with cocoa beans and prices were raised 1c. to 66c. to 71c. per pound, spot, according to quantity.

Copra — Active inquiry for European account and light offerings continued feature this market. November shipment was held at $247.50 per ton, c.i.f. Pacific coast.

Fats and Greases

Greases — Slow demand and increased offers created an easier tone. Yellow was reported moved at 5¼c. per pound, tankcars, delivered. Choice white was inactive and nominal at 6½c., same basis.

Lard—Trading was reported limited to prompt needs. Cash lard closed steady at 8¼c. per pound, drums, Chicago.

Tallow—Tone of the market was unsettled, with limited trading reported at ⅛c. less. Bleachable fancy was sold at 6¼c. and 6⅜c. per pound, tankcars, delivered, according to seller and quantity. Prime ranged from 6c. to 6⅛c.; special, 5⅞c. to 5¾c. and No. 1, 5¼c. to 5⅜c., same basis. Edible tallow was unchanged at 8¾c. to 8⅝c., tankcars, same basis. Export business was reported light. Guaranteed fancy was entirely nominal at 8c. per pound, drums, f.a.s. due to the scarcity of containers. Bulk lots were unchanged at 7c., same basis.

Fish Oils

Cod—Improved consuming demand has created a steadier tone in replacements and on spot. Replacements were firmer and generally held at 7¼c. per pound, bulk, f.o.b. New England points. Drums were higher on the spot and raised to 8¼c. to 8⅜c. per pound, as to quantity.

Menhaden — Trading was limited, and confined to domestic needs, while export interest was reported inactive. Crude was steady and unchanged at 7¼c. per pound, tankcars, f.o.b. works, with business reported at this figure. Menhaden fishing was reported fair, with production still affected by lean fish. Refined grades were firm and well held at the recent advance of 3/10c. per pound. Light pressed was quoted at 10c. per pound, tankcars, New York basis.

Production of fish oils totaled 12,317,733 gallons during January-July, 1959, it was reported by Fish and Wildlife Service, compared with 9,763,767 gallons for the same period last year. There was a seasonal decline in production during the last quarter. Exports of inedible fish oils during the first seven months of 1959 were more than double of the previous year, totaling 77,633,000 pounds against 38,336,000 pounds for the same period in 1958. Considerable increases in shipments to Sweden, Norway, Netherlands and West Germany offset the sharp decline to Canada.

Cake and Meal

Cottonseed Meal—This market was stronger and sharply higher due to active demand for export and smaller production. Meal 41 percent was boosted to $64 per ton, sacked. Memphis; $63, Alabama and $65, Georgia-Carolina for immediate through December shipment.

Linseed Meal—Prices for nearby delivery were firm and unchanged. Deferred shipments were up $1 a ton. Stronger undertone reflected sharp advances and tight situation in cash flaxseed more than any aggresive demand from formula feed manufacturers. Withdrawals against old balances were good to excellent. Extracted meal, 34 percent protein, was unchanged at $70 per ton, Minneapolis for October shipment and $71, November-December. Old process expeller meal, 32 percent, was $1 higher at $75.50 for October, none offered beyond.

Peanut Meal—Good export business has cleaned up bulk of light stock. Prices were higher Production was very low. Meal, 45 percent was nominal at $67.50 per ton sacked, f.o.b. Georgia and Alabama shipping points.

Soybean Meal—Demand was only fair for soybean meal and prices tended towards easiness. New export sales and shipments against old foreign contracts were steadying influence at Decatur, where prices were unchanged to 50c. lower. Eastern trunk line was barely steady after declines totaling $2.50 a ton and Northwest was weakest market, down $3 to $3.50 a ton. Negotiations were under way on a round lot for export through Duluth-Superior. Meal, 44 percent, was quoted at $57 a ton, unrestricted, bulk, Decatur, for prompt shipment.

Waxes, Vegetable

Consuming demand for vegetable waxes continued spotty and confined to prompt delivery last week. Firm tone prevailed in crude and refined beeswax due to the scarcity of bleachable replacements from Brazil, Chile and Central America with quotations merely nominal. This created a firmer tone in refined and quotations were strong, with intimations of higher prices soon. African crude remained steady ranging from 53c. to 54c. per spot, as to quantity. Light demand for carnauba grades, combined with increased recent arrivals caused a slightly easier tone in crudes. No. 3 Ceara crude was lower at 76c. to 77c. per pound, spot as to quantity and Parnahyba at 78c. to 79c., same basis. No. 1 yellow Ceara and Parahyba were weak and sharply lower. Both grades were available from $1.16 to $1.19 per pound, on spot, depending upon seller and quantity. Chalky and No. 2 North Country also were off 1c. to 2c. per pound. Other vegetable waxes were unchanged and fairly steady.

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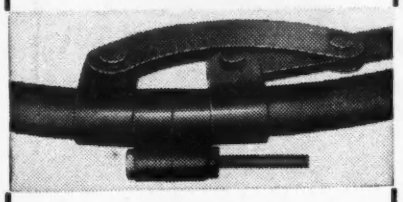

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Tidewater is Constructing Gasoline Plant in Louisiana

Tidewater Oil Company is constructing a $1.5 million gasoline plant in the Hollywood Houma Fields area, Terrebonne Parish, La., on a 9.2 acre tract. Four miles west of Houma, the land was purchased by Tidewater from Southdown, Inc.

The gasoline plant—which will process 75 million cubic feet per day of separator residue gas produced from the Southdown, Krumbhaar and Gaidry formations in the Hollywood and Houma Fields—will be the low temperature absorption type designed to operate at O degrees Fahrenheit and at a pressure of 1,030 pounds per square inch.

It is designed to recover 85 percent of the propanes and virtually 100 percent of the butanes and heavier gas liquids contained in the lease separator residue gas. Liquid recovery is calculated to be 1,030 barrels per day of propane, butanes and natural gasoline.

Coaltar Color Law

—Continued from page 3

of decertified colors involves six coaltar colors recently removed from the list as harmless, and one other color for which manufacturing specifications have recently been changed. Cut-offs, or revocation dates of DAF certificates, will also be provided for colors delisted in the future, it was stated.

Under the new regulation, removal of a coaltar color from the list of permitted colors prohibits future sales or use of that color in products for which the color was formerly certified, FDA explained.

Products made with the banned colors after specified cut-off dates will be considered adulterated and thus illegal under the food, drug, and cosmetic act.

On the other hand, products made with FDA-certified colors prior to the cut-off dates will not be considered adulterated—even though they may contain the banned colors—unless it is determined that existing stocks cannot safely be used, FDA said. In the latter event, special regulations covering the situation will be issued.

The announcement does not specify a cut-off for seventeen lipstick colors recently removed by FDA from the list of colors allowed for human use because the time limits within which appeals can be filed have not elapsed.

The cut-off dates for the seven colors named in the latest announcement are:

- January 1, 1960—For all certificates issued for existing batches and portions of batches of FD&C Orange Nos. 1 and 2, FD&C Red No. 32, and FD&C Yellow Nos. 1, 3, and 4 before these colors were removed from the list.
- January 15, 1960—For all certificates issued for existing batches and portions of batches of FD&C Red No. 1 that do not comply with new specifications published in the *Federal Register* of July 16, 1959.

United Carbon Sells

—Continued from page 5

now holds 100 percent control of the styrene company and 75 percent of the butadiene unit.

Terms of the acquisition were not revealed. United Carbon reports that it will continue to meet its butadiene and styrene requirements from El Paso's units under the same general terms of the original sales contract between the two firms.

Capacity of the butadiene unit is rated at 115 million pounds per year, and that of the styrene unit at 45 million pounds.

Escambia Fills Position

Escambia Chemical Corporation, New York, has named Erhart K. Drechsel manager of new product development. Mr. Drechsel has been with Escambia since 1957 in market research and new product development.

2—OLIVER PRESS. PRECOAT FILTERS, 5'3" x 3'—Type 316 S.S.

4—RIBBON BLENDERS, 2500 gallons, Roller bearings, stuffing boxes.

3—SIFTERS—READCO, 36" x 78".

1—AUTOCLAVE, 50 gal. S.S. 2000 lb. press.

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1—Jeffrey Vibrating Conveyor.
2—30" Sperry Filters, closed del., 3-eye, 39-plates, 40-frames—$1950.00 ea.
1—42" Sperry Filter 40-plates, 41-frames, hyd. closing, open del.—$2500.
9—Blackburn Smith Pressure Leaf Filters with S.S. Leaves.
1—International Ball Mill, porcelain lined, 48" x 60", 15 H.P. Unibroke Motor, 2-drums balls Like new—$3200.
1—Schutz-O'Neill Pulverizer 22", Style D.
1—Sparkler Filter 18" dia., 7-plates, 316 Stainless-steam jacketed.
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1—250 gal. Kettle, nickel jacket, 100#, A.S.M.E.
2—Axial Flow Fans with 7-½ H.P. motors —$750.00 ea.
1—430 S.S. Tank 3000 gal. vert. ⅜ plate, with 2 pc. cover.
2—Vacuum Pumps, Gardner-Denver, 5" bore 4" stroke, with 7-½ H.P. motors.
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1—Air Compressor, Gardner-Denver, 8 x 2-¼ x 4, with 15 H.P. motor.

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1—Devine Vac. Shelf, 19—59" x 78" shelves.

1—Devine Vac. Shelf, 10—40" x 43" shelves.

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"Industry's Launching Site for Projecting Packaging Progress" is the theme set by the Packaging Institute for its twenty-first annual convention, November 16, 17 and 18 at the Statler hotel, New York. Topics to be covered at the meeting include package marketing, research and development, drugs and pharmaceuticals, production line and machinery and printing.

Naphthalene Starvation Heads Hunger List

—Continued from page 3

Springs, W. Va., Mr. Kinsella got right to the point:

"The primary problem is the shortage of naphthalene and the inability to depend on the foreign market. With production of phthalic anhydride about one-third greater in 1959 than in 1958, demand for naphthalene has been strong, but imports will be lower than last year."

Less foreign naphthalene is available, Mr. Kinsella observes, and that which is available is uneconomically priced. (Imports are offered at around 10 cents a pound, c.i.f., and are generally held to be priced well above what US consumers are willing to pay. What's more, not enough is offered at a time to make distilling operations economically feasible.)

Lack of naphthalene means strangulation of phthalic anhydride—which accounts for 80 percent of total naphthalene consumed. Dearth of raw materials is sending phthalic producers here scurrying around to see what they can dig up.

Use of o-Xylene

One solution: use of o-xylene. Some plants can use either naphthalene or o-xylene to produce phthalic. Oronite Chemical Company's plant in Richmond, Calif., uses the latter to make phthalic and isophthalic.

Says Mr. Kinsella of Allied's operations: "Our company's consumption of ortho this year already runs well into seven figures." Further, he points out, petroleum companies have stepped up their progress in the area of obtaining high melting point naphthalene from their crudes.

But all is not rosy on the o-xylene front, either. Some sources report that a few plants got decent results at first when they tried to use o-xylene to make phthalic—but that later output was black.

Other problems are said to be a smaller yield, and a relatively high cost of raw materials. Further, Japan is said to have bought up the remainder of what little o-xylene is available on the market.

The fact is that more than 500 million pounds of phthalic capacity today depends on naphthalene—and there isn't much around to speak of.

Further, most observers believe that even if the Taft-Hartley injunction goes through, it'll take most of the eighty days for the coal chemical industry to get going again.

"Another problem from a long-term point of view is the imbalance between coke production and coal chemical needs," Mr. Kinsella emphasizes.

How Cokeovens Are Usually Run

"Because coke is so easy to store, producers tend to run cokeovens at high rates even when business is slow, thereby flooding coke chemical markets; coke producers then are slow in coming back up when chemical crudes are needed."

This can be illustrated by some observers' estimates that it will be a full six weeks, under ordinary circumstances, before the mills can get back to peak capacity. This means five weeks of full output before the next walkout—assuming the T-H injunction goes through, and the workers leave the job at the end of the eighty-day period.

During the strike, furnaces have been banked. One problem of startup: There's no telling when or where a failure in refractory brick will happen in re-heating.

Further, under an injunction, there is expected to be some sort of slowdown in work.

Should things get rolling again, it's generally conceded that naphthalene and phthalic supplies will be crucial for some time to come. Light oils and tar acids are not expected to be as hard-hit.

Says Mr. Kinsella: "The effect of the steel strike on benzene and tar acids has not been nearly as great as on naphthalene, and re-starting of cokeovens should lessen the supply problem here very quickly."

Benzene and the cresols, for instance, are produced in sizable quantity by the petroleum industry, which has had no interruption in output.

Benzene Future Rife With Rumor

Rumors are flying thick and fast regarding benzene's immediate future. One thought currently circulating: When cokeoven benzene again becomes plentiful, will petroleum producers hack prices in order to move out their stocks and retain customers gained during the strike?

It's a hot question, and the arguments are strong both pro and con. On the petroleum side, a beefy argument is that now that the industry knows what it can do, it will chop prices in order to keep business away from the cokeoven benzene producers.

The coaltar side points to this fact of life, however: No matter how low the petroleum boys go, coaltar benzene has to be moved anyway, regardless of price. The benzene cut is always coming off in coking operations—whereas in petroleum, flexibility allows refiners to leave the benzene cut in their gasoline when upgrading is unprofitable.

A large segment of the industry takes the position that there's room for both sides. Further, it's argued, booming demand for benzene isn't likely to result in price cuts. In fact, recent moves on the Gulf Coast have been in an upward direction, if anything.

Death Toll of Chemicals

Whatever happens in the near future is moot, at the moment, but what's happened as a result of the strike can't be denied. Here's the death toll of a 100-day period in the walkout:

Ammonia, 5,239 tons lost; ammonium sulfate, 227,600 tons; benzene, 42 million gallons; coaltar, 143.6 million gallons; crude chemical oil, 7.7 million gallons; crude solvent naphthas, 1.4 million gallons; toluene, 10 million gallons; and xylene, 3 million gallons.

Chemicals supplied to the steel industry have lost out badly during the strike. Here's an estimate of output and demand for several of the larger volume materials over a 100-day period:

Coke, 16.6 million tons lost; lime, 396,000 tons; fluorspar, 60,000 tons; nickel, 12,000 tons; hydrofluoric acid, 1,500 tons; hydrochloric acid, 36,000 tons; nitric acid, 22,500 tons; sulfuric acid, 250,000 tons; oxygen, 67.4 billion cubic feet; sodium phenolate, 100,000 pounds.

Here's the outlook for sulfuric in the steel industry, as seen by one observer:

As soon as workers go back, cokers will order acid right away to make ammonium sulfate. They are operating right now at a very low rate on agreement with the union. (If ovens were shut down completely, they would have to be entirely re-lined to start up again.)

Ammonium Sulfate Output Varies

Manufacture of ammonium sulfate during the strike has varied from district to district, depending on individual contracts with union locals.

In the Buffalo area, for example, the union allows no deliveries of sulfuric during the strike. Hence, gases pass off cokeovens unconverted.

In Cleveland, however, the contract allows for deliveries of small amounts of acid—enough to convert the sharply-curtailed gas output of cokeovens.

It will take picklers some time to order acid, depending strictly on availability of raw stock for pickling. If stocks are available at the end of the strike, they'll order at a steady rate—but if stocks are unavailable, they'll have to wait until steel mills are running full tilt in order to start buying acid for pickling again.

Thus, a five-week delay is envisioned in the latter case, and this applies to sulfuric and other pickling acids: nitric, hydrochloric and hydrofluoric.

It's expected that demand for lime will bounce back almost immediately, once the mills get going again. Buying interest for other metals will pick up sharply.

So whether or not the steel strike is halted by injunction now or in the near future, the outlook for the chemical industry connected with it—at least for the next five to six weeks—is as black as pitch.

MCA Sets Speaker Slate For Semi-Annual Meeting

Manufacturing Chemists Association has a slate of distinguished speakers for its ninth semi-annual meeting and midyear conference scheduled for November 24 at the Statler Hilton hotel, New York. MCA expects to have about 1,000 chemical industry executives at the get-together.

Highlighting the all-day session will be a talk by Vannevar Bush, noted scientist, author and industrialist, who has been named banquet speaker. Luncheon speakers for the meeting will be Peter C. Allen, president of Canadian Industries, Ltd., and Gen. John E. Hull, USA (Ret.), MCA president.

Six panel discussions during the day will reflect some major areas of current interest to chemical industry management, according to MCA. Discussion topics include international chemical operations, industrial relations, chemical marketing, industry-government relations, science teaching, and the construction industry as a growing market for plastics.

Additive Makers Find Guaranties

—Continued from page 3

recognized to be safe. If an article is a "food additive" and its "use or intended use" is not in accordance with a regulation or exemption issued under the additives law, the article and the food containing it is considered to be "adulterated."

MCA said that therefore, it seems clear that whether or not a food ingredient is "adulterated" under the food additives amendment is dependent in part, on the "use or intended use" for the ingredient by the food processor. And since the use of the additive is so vital to the determination of whether the food is adulterated, it was though unwise to continue using a form of guaranty which states, without qualification, that all food ingredients when shipped or delivered are not adulterated.

In view of this, MCA is suggesting to its members that they review their guaranty forms; recognizing that the problem confronts companies in varying ways and to different degrees and that they should use that form and practice which best suits the need or preference.

To aid those companies which may find it necessary to change the guaranty form, MCA has suggested the following as a model:

GUARANTY UNDER SECTION 303(C) (2) OF THE FEDERAL FOOD, DRUG, AND COSMETIC ACT*

Gentlemen:

[For the purposes of Section 303(c) (2) of the Federal Food, Drug, and Cosmetic Act], the ———— Company hereby guarantees that, as of the date of each shipment [or delivery] by it to the ———— Company [of any article listed in Annex A hereto] [Alternative wording: of any article subject to the provisions of the Federal Food, Drug, and Cosmetic Act], such article is not, when shipped [or delivered], adulterated or misbranded within the meaning of the Federal Food, Drug and Cosmetic Act [or of any applicable state law in which the definitions of adulteration and misbranding are substantially the same as those contained in the Federal Food, Drug, and Cosmetic Act] The ———— Company further guarantees that, as of the date of each such shipment [or delivery], no such article is an article which may not, under the provisions of section 404 or 505 of the Federal Food, Drug, and Cosmetic Act, be introduced into interstate commerce.

[This guaranty shall, however, be void and of no effect in any instance where the particular use by the ———— Company of any article to which this guaranty would otherwise apply is a use which is not in accordance with the requirements of the Federal Food, Drug, and Cosmetic Act of applicable state laws]. [*Alternative wording:* With respect to articles which are subject to the Food Additives Amendment of 1958, this guaranty applies only to such articles as are listed in Annex B hereto when used as stated therein, as well as to such articles and any other articles to the extent their use is or becomes authorized by a regulation issued under the Food Additives Amendment of 1958].

This guaranty shall be a continuing guaranty and shall continue in effect for a period of —— years from the date hereof, or until such earlier date as the ———— Company shall receive from the undersigned Company written notice of the revocation of the guaranty contained herein.

———— Company

By ————

This form of Guaranty has been prepared by the Manufacturing Chemists' Association, Inc.

ANNEX A
ANNEX B

* The portions in brackets represent language which member companies may, or may not, wish to use depending upon their individual situations.

With respect to requests of food industry customers of the chemical additives manufacturers for product guaranties that would extend the liability of manufacturers substantially, counsel for MCA has advised the association that the law makes no such requirement and additives manufacturers should be aware of the risks involved.

It is his view that the guaranty provisions which the FDA act makes applicable to food additives are designed only for the limited purpose of protecting food manufacturers and suppliers against criminal liability under the enforcement provisions of the act. These guarantees are not intended to enable food manufacturers to protect themselves from civil liability by obtaining civil indemnification or "hold harmless" agreements from manufacturers of additives.

Whether or not the additives manufacturers will wish to give guaranties against civil liability is, of course, a matter for individual decision, it is pointed out, but they should be aware of the considerable extension of liability to which such a guaranty exposes them beyond the present limits of legal responsibility in the absence of such agreement.

The law in this field differs among the states, and no general statement of the present limits of civil liability is accurate for all jurisdiction, but the counsel noted that in most states it seems clear that in the absence of a guaranty a food manufacturer or supplier may obtain indemnity from the manufacturer of a food additive only where harm to the consumer results solely from the additive manufacturer's negligence.

In view of the fact that the regulatory requirements of the food additives law are principally conditioned upon the "use" made of the additive by the food processor, plus the fact that the law embraces a new toxicological concept of safety, the counsel believes that it has now become impossible for the additive manufacturer to insure the continued safety of his product once it reaches the hands of the food manufacturer.

Trade Name Chemicals

—Continued from page 49

"Renex 20" is compatible with soap, anionic and cationic materials, common alkaline and phosphate builders, ketones, aromatic hydrocarbons, esters and mixed solvents containing aromatics.

Among its general characteristics, Atlas describes **"Renex 20"** as being an oily liquid which gels at low temperatures, having an approximate viscosity of 400 cps. at 25°C., pH of 7 in a one percent solution, 1.1 approximate specific gravity, flash point of 550°F., mild fatty odor, and it is a light amber colored liquid which is slightly hazy becoming clear on warming.

"Renex 22" is another Atlas detergent, similar to **"Renex 20"** but with lower foaming properties. Classified as a nonionic detergent, Atlas describes **"Renex 22"** as being a clear, amber colored oily liquid at 25°C. with specific gravity of 1.07, viscosity at 25°C. of 300 cps., flash point of 510°F., and fire point of 607°F.

Dispersible in water, **"Renex 22"** is said to be soluble in acetone, ethyl acetate, dioxane, cellosolve and aniline. It is insoluble in kerosene, Stoddard solvent and ethylene glycol.

Mona Industries, Inc., markets the **"Monamines,"** which the company describes as being conventional fatty acid-amine condensates. Nonionic compounds with cationic tendencies, the **"Monamines"** are said to be 100 percent concentrated and liquid at normal temperatures.

According to Mona, the **"Monamines"** are water soluble in any ratio. However, aqueous solution of **"Monamine ACO-100"** are unstable, forming crystals at low temperatures. Also soluble in aromatic and chlorinated aliphatic solvents the **"Monamines"** are soluble as well as in most petroleum solvents and mineral oils.

Concerning foaming characteristics, Mona claims that the **"Monamines"** are good foamers, with **"Monamine ACO-100"** the best. Foam performance of the alkylarylsulfonates can be greatly improved, continues Mona, with the incorporation of the **"Monamines,"** especially grades **"AD and ACO,"** boosting and stabilizing foaming tendencies, praticularly when used in liquid detergents.

The **"Monamines"** have good detergent action as a result of what Mona says is powerful fat and grease emulsification and good suspending power to counteract the redeposition of dirt. Addition of alkalies, such as soda ash, borax, phosphates, or silicates, is said to increase detergency efficiency. The incorporation of fatty acids, such as oleic or stearic acids, coconut fatty acids, cottonseed fatty acids, tall oil, etc., results in increased viscosity of the aqueous solutions leading, in certain cases, to regular gels. This same alkaline character of the **"Monamines"** which invites the addition of fatty acids likewise increases blending properties with free alkylarylsulfonic acids.

Thickening Agents

"Bentone 27" is a new gelling agent manufactured by National Lead Company designed for use with the more polar organic solvents and synthetic vehicles such as are used in many industrial finishes and pigmented lacquers. Furthermore, the company says it is effective over a wide range of organic liquids, including systems containing predominantly non-polar constituents.

Supplied as a fine, creamy-white powder, **"Bentone 27"** is described as being an organic derivative of a special magnesium montmorillonite, in which the organic portion is linked to the montmorillonite through a stable chemical bond. Montmorillonite is a hydrous silicate mineral having an expanding latex.

National Lead states that stable gels of **"Bentone 27"** are produced in highly polar organic liquids such as ethyl acetate, methyl ethyl ketone, and both acetate and ketone-based lacquer solvent systems as well as in liquids of intermediate polarity, such as chlorinated solvents and in such non-polar liquids as aromatic and aliphatic thinners.

With regard to particle suspension, National Lead claims that **"Bentone 27"** eliminates the possibility of hard settling of suspended pigments, heavy reactive particles, fillers, or abrasives. Thus reincorporation of soft settled particles becomes simply a matter of gentle agitation.

Further properties listed by National Lead include the fact that **"Bentone 27"** gels prevent free motion of pigment particles in an organic liquid. And **"Bentonite 27"** is said to exert a strong reinforcing action in non-volatile organic compositions.

Crusader Chemical Company, Inc., offers a secondary gellant for latex compounds trade named **"Stayb N2."** Described as being an effective gelling and processing aid for operations using sodium silico fluoride gellants, **"Stayb N2"** is said to increase the rate of deposition and the early wet strength of the deposited film.

A low viscosity alkaline water dispersion of insoluble salts, **"Stayb N2"** has carefully controlled composition, states Crusader. Also, it decomposes under the influence of the coagulant and then carries a positive electrical charge. When added to compounded or uncompounded alkaline latex systems it does not coagulate or cause flocculations. Finally, this liquid is said to be amber in color and non-discoloring to elastomers.

Morningstar-Paisley, Inc., manufactures a thickening agent which is of interest to the corrugated manufacturer. **"Viscosity Stabilizer #822"** is a material that maintains the proper viscosity of the starch formula. Morningstar claims that it can hold great quantities of water and thus helps to eliminate water starved joints. The company also says that **"Viscosity Stabilizer #822"** improves the bonding pattern and over-all strength of the lamination.

Advertisers' Index

Acme Hardesty Co. 64
Air Reduction Chemical Co. 34
Allied Chemical Corporation, National Aniline Division 17
Allied Chemical Corporation—Plastics & Coal Chemicals Division 46
American Cyanamid Company 25
American Firstoline Corporation 38
American Lignite Products Co. 64
American Potash & Chemical Corporation 29
Amoco Chemicals Corporation 13
Archer-Daniels-Midland Company, Chemical Products Division 49
Argueso, M., & Co., Inc. 65
Armour Pharmaceutical Company 52
Aromatic Products, Inc. 58
Ashcraft-Wilkinson Co. 42
Baker, H. J., & Bro. 64
Baker, J. T., Chemical Co. 1
Barclay Chemical Company, Inc. 70
Becco Chemical Division, Food Machinery & Chemical Corp. 38, 45
Bios Laboratories, Inc. 53
Blockson Chemical Company 38
Bonewitz Laboratories, Inc. 52
Bower, Henry, Chemical Mfg. Co. 39
Bowman Feed Products, Inc. 52
Brill Equipment Company 66, 67
Brode Corporation, The 65
Brooks, P. W., & Co. 49
Celanese Corporation of America, Chemical Division 72
Chemical Manufacturing Co., Inc. 39
Chemical & Process Machinery Corp. 69
Chemical Service Corp. 70
Chemical Solvents, Inc. 72
Chemirad Corporation 45
Chemsol, Inc. 70
Climax Molybdenum Company 39
Columbia Southern Chemical Corporation 26, 36
Columbian Carbon Company 58
Commercial Solvents Corporation 19
Concord Chemical Company 47
Conray Products Co., Division Chemical Service Corp. 52
Coupe, Robert A. 38
Cowles Chemical Company 39
Delhi-Taylor Oil Corp. 33
Devold, Peder, Oil Company 51
Diehl, Wm., & Co. 65
Distillation Products Industries, Div. of Eastman Kodak Company 45
Dixon International, Inc. 32
Doggett, Stanley, Inc. 56
Dow Chemical Company, The 36, 47
Drum Parts, Inc. 66
DuPont de Nemours, E. I., & Co., (Inc.) 1
Duval Sulphur & Potash Co. 42
Eastman Chemical Products, Inc. 18
Emery Industries, Inc. 55
Enjay Company, Inc. 59
Equipment Clearing House, Inc. 66
Fairmount Chemical Co., Inc. 52
First Machinery Corp. 67
Florasynth Laboratories, Inc. 62
Freeport Sulphur Company 42
Fritzsche Brothers, Inc. 62
Gelb, R., & Sons, Inc. 69
General Smelting Co. 56
Grace Chemical Company, Division of W. R. Grace & Co. 56
Greeff, R. W., & Co. 32
Gulf Oil Corporation 43
Halby Products Company 40
Harchem Division, Wallace & Tiernan, Inc. 64
Harshaw Chemical Co., The 53
Heat & Power Co., Inc. 69
Hercules Powder Company, Incorporated 15
Hoffmann-La Roche, Inc. 8, 51
Hooker Chemical Corporation 37
Hooker Chemical Corporation, Phosphorus Division 40
Hutchinson, D. W., & Co., Inc. 62
International Minerals & Chemical Corporation 27
International Petrosolvents, Inc. 44
Jefferson Chemical Company, Inc. 28
Lawler Company 66
Lebanon Chemical Co. 42
Lever Brothers Company 44
Loeb, H., & Son 66
Loeb Equipment Supply Co. 69
Lucidol Division, Wallace & Tiernan, Incorporated 49
Machinecraft Corp. 66
Machinery & Equipment Company 66, 69, 70
Machinery & Equipment Co., The 66
Magnus, Mabee & Reynard, Inc. 62
Mantrose Corporation, The 57, 60
Mason & Dixon Tank Lines 48
Michigan Chemical Corporation 70
Miles Chemical Company 14
Millmaster Chemical Corporation 72
Mississippi Lime Company 59
Montrose Chemical Company 32
Mutual Citrus Products Company 23
Naugatuck Chemical Division United States Rubber Co. 30
Neville Chemical Company 72
NYQ Chemical Division, S. B. Penick & Company 6
Olin Mathieson Chemical Corporation Chemical Division 48
Oronite Chemical Company 21
Penick, S. B., & Company 62
Pennsalt Chemicals Corporation, Industrial Division 1
Penola Oil Company 31
Perry Equipment Corp. 68
Pfaltz & Bauer, Inc. 52
Pfizer, Chas., & Co., Inc. 50
Petroleum Chemicals, Inc. 44
Phelps Dodge Refining Corporation 38
Philipp Brothers Chemicals, Inc. 37
Fillsbury Company, The 45
Plastics and Coal Chemicals Division, Allied Chemical Corporation 46
Polak's Frutal Works 63
Prior Chemical Corporation 1
Process Plants Service, Inc. 69
Procter & Gamble Co. 44
Publicker Industries, Inc. 11
Pure Carbonic Co. 41
R-B-H Dispersions Color & Chemicals Division, Interchemical Corporation 58
Raney Catalyst Co. 45
Read, Chas. L., & Co., Inc. 57
Reinhart Chemical Corporation 47
Republic Steel Corporation 47
Riches-Nelson, Inc. 72
Richter, Gedeon Pharmaceutical Products, Inc. 53
Robeco Chemicals, Inc. 72
Rosenthal's, Joseph, Sons, Inc. 66
Ross, F. H., & Co. 36
Sergeant, E. M., Pulp & Chemical Co., Inc. 72
Shell Oil Company 43
Smith-Douglass Company, Inc. 38
Sonbert Chemical Company 53
Stauffer Chemical Company 37
Stein Equipment Co. 69
Sterwin Chemicals, Inc. 63
Sunkist Growers, Inc. 22
Sussman, Louis, Inc. 70
Synthetic Products Company 57
Tennessee Corporation 35
Treen Box Co. 41
Union Carbide Chemical Company, Division of Union Carbide Corporation 1
U. S. Borax & Chemical Corporation 1
United States Potash Company Division of U. S. Borax & Chemical Corp. 42
U. S. Steel Corp. 48
United Ultramarine & Chemical Company, Inc. 55
van Ameringen-Haebler, Division of International Flavor & Fragrances, Inc. 63
Wallerstein Company, Inc 53
Welch, Holme & Clark Company, Inc. 65
Western Pennsylvania Chemical Co., Inc. 41
Westvaco Mineral Products Division, Food Machinery & Chemical Corporation 2
Wolf, Bill, Inc. 66
Wyandotte Chemicals Corporation 41

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